

US Army Corps
Of Engineers
Afghanistan Engineer District

G2 INTELLIGENCE COMMAND AND HEADQUARTERS SECURITY BRIGADE

KABUL, AFGHANISTAN Project No.

REQUEST FOR PROPOSAL (RFP)

ELECTRONIC BIDS WILL NOT BE ACCEPTED

MAY 2006

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SOLICITATION, OFFER,		1. SOLICITATION NO. 2. TYP		PE OF SOLICITATION		3. DATE ISSUED	PAGE OF PAGES
AND AWARD		W917PM-06-R-0037		SEALED BID (IFB)		29-May-2006	1 OF 288
(Construction, Alteration, or F	Pepair) W917 PWI-06-R-0037			NEGOT	IATED (RFP)		1 OF 200
IMPORTANT - The "offer" section on the reverse must be fully completed by offeror.							
IMPORTANT - The offer section	1 on the re	everse must be fully completed by t	orreror.			1	
4. CONTRACT NO. 5. REQUISITION/PURCHASE REQUEST						6. PROJECT NO.	
7 1001150 001					DE00 05550 TO		
7. ISSUED BY	C	ODE W917PM		8. ADD	RESS OFFER TO	(If Other Than Item 7)	CODE
AFGHANISTAN ENGINEER DISTRICT US ARMY CORPS OF ENGINEERS							
KABUL				S	ee Item 7		
APO AE 09356							
TEL:		FAX:		TEL:		FAX:	
				I IEE.			(NO COLLECT CALLO)
9. FOR INFORMATION CALL:	A. NAME				B. TELEPHONE NO	(Include area code)	(NO COLLECT CALLS)
CALL.	MAMIE R	ANDERSON			540-665-3467		
			SOLICIT	ATION			
				7111011			
NOTE: In sealed bid solicitation	ons "offer	and "offeror" mean "bid" and	"bidder".				
10. THE GOVERNMENT REQUIR	ES PERFO	RMANCE OF THE WORK DESCRIB	ED IN THE	ESE DO	CUMENTS	(Title, identifying	no., date):
Design-Construct G2 Intelligence	Command	and Headquarters Security Brigade, I	Bala Hissaı	r, Kabul,	Afghanistan		
DDEDDODOOM OOMEDDING	/ OITE \ ((0)	TWILL BE UELD 1					
PREPROPOSAL CONFERENCE	/ SITE VIS	IT WILL BE HELD June 5, 2006, 9:00	AM LOCA	ALTIME			
Offerors who plan to participate in	the site vis	sit must provide additional information	.(See Clau	se 52.23	36-27 ALT I)		
	Offerors who plan to participate in the site visit must provide additional information.(See Clause 52.236-27 ALT I)						
Estimated cost range of this project	ct is betwee	en \$10,000,000.00 and \$25,000,000.0	00				
NOTICE: Return Section 00600, "Representations and Certifications" and requested pre-award information from Sections 00010" Solicitation							
l ·		le/Instructions to Bidders", with your p					
\/		A be addressed to the consequent test of the later	0 - 1	. La accida			
· ·		t be directed to the person listed in Ite		e. Inquir	ies and request that ar	e directed to any	
Other person may not be relayed	other person may not be relayed to the proper person and therefore, may not be answered.						
If proposal is hand carried, deliver to: US Army Corps of Engineers, House 1 Street 1, West Wazir Akbar Khan (behind Aman High School) ,							
Kabul, Afghanistan, Attn: Mamie Anderson, 540-665-3467, prior to the time and date specified below for receipt of proposals. Due to							
heightened security conditions, a	ccess to the	e building is controlled by security per	rsonnel.				
11. The Contractor shall begin perfo	rmance wi	ithin 10 calendar da	ys and con	nplete it	within 570	calendar days after rece	eiving
12 A. THE CONTRACTOR MUST FURNISH ANY REQUIRED PERFORMANCE AND PAYMENT BONDS? (If "YES," indicate within how many calendar days after award in Item 12B.)							
YES X NO							
13. ADDITIONAL SOLICITATION F	EQUIREM	IENTS:					
A. Sealed offers in original and	3	copies to perform the work re	quired are	due at t	he place specified in It	em 8 by 0	05:00 PM <i>(hour)</i>
local time 28 Jun 2006 (date). If this is a sealed bid solicitation, offers must be publicly opened at that time. Sealed envelopes containing offers							
shall be marked to show the offeror's name and address, the solicitation number, and the date and time offers are due.							
B. An offer guarantee is, X is not required.							
C. All offers are subject to the (1) work requirements, and (2) other provisions and clauses incorporated in the solicitation in full text or by reference.							
D. Offers providing less than 60 calendar days for Government acceptance after the date offers are due will not be considered and will be rejected							
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NSN 7540-01-155-3212 1442-101 **STANDARD FORM 1442** (REV. 4-85)

STANDARD FORM 1442 Prescribed by GSA FAR (48 CFR) 53.236-1(e)

			SOLICITATI	ON, OFFER, AN						
					n, Alteration, o		.ffa.ua.u\			
14. NAME AND ADDRE	SS OF OFFER	OP	(Include ZIP Co		15. TELEPHO	completed by o		2)		
14. NAME AND ADDITE	LOG OF OTTER	OK	(Include ZII Col	<i>16)</i>	15. TELEPHO	NE NO. (II	nclude area code	=)		
					16. REMITTAI	ICE ADDRESS	(Include	only if different the	an Item 14)	
					See Item 14	l				
CODE	FA	CILITY COI	DE							
17. The offeror agrees t	to perform the w	ork required	at the prices spec	cified below in strict	accordance wit	n the terms of th	is solicitation, if	this offer is		
accepted by the Govern	_							y number equal to	or greater the	an
the minimum requireme	ents stated in Ite	m 13D. Fail	lure to insert any r	number means the o	offeror accepts t	he minimum in li	tem 13D.)			
AMOUNTS SE	E SCHEDULE	OF PRICES								
18. The offeror agrees t	n furnish any re	quired perfo	rmance and navm	ent honds						
To. The offeror agrees to	o rainion any ro	quirca perio	manec and paym	19. ACKNOWLED		ENIDMENITO				
			(The offeror acknowle	dges receipt of amendr			and date of each)			
AMENDMENT NO.										
DATE										
20A. NAME AND TITLE OFFER (Type or pri		AUTHORIZE	ED TO SIGN	1	20B. SIGNATU	IRE		2	0C. OFFER I	DATE
			AW	ARD (To be comp	l oleted by Gove	rnment)				
21. ITEMS ACCEPTED	 :					<u> </u>				
22. AMOUNT	2	23. ACCOU	NTING AND APPE	ROPRIATION DATA	4					
24. SUBMIT INVOICES	TO ADDRESS	SHOWN IN		ITEM	25. OTHE	R THAN FULL	AND OPEN CO	MPETITION PUR	SUANT TO	
(4 copies unless otherwise s	pecified)				10 U	S.C. 2304(c)		41 U.S.C. 25	53(c)	
26. ADMINISTERED B	Y	COD			27. PAYM	ENT WILL BE N	MADE BY:	CODE		
		CONTE	PACTING OFFICE	R WILL COMPLET	E ITEM 28 OR	DO AS ADDI ICA	RI F			
28. NEGOTIATED	AGREEMENT		actor is required to sig					ed to sign this docume	nt)	
document and return					29. AWARD (Contractor is not required to sign this document.) Your offer on this solicitation, is hereby accepted as to the items listed. This award con-					
to furnish and deliver all items or perform all work, requisitions identified					summates the contract, which consists of (a) the Government solicitation and					
on this form and any continuation sheets for the consideration stated in this					your offer, and (b) this contract award. No further contractual document is					
contract. The rights and obligations of the parties to this contract shall be governed by (a) this contract award, (b) the solicitation, and (c) the clauses,					necessary.					
representations, certifications, and specifications or incorporated by refer-										
ence in or attached to this contract.					212	OR COMPAGNATION		/ ***		
30A. NAME AND TITLE OF CONTRACTOR OR PERSON AUTHORIZED TO SIGN (Type or print)					31A. NAME OF CONTRACTING OFFICER (Type or print)					
30B. SIGNATURE			30C. DATE		TEL:		EMA	AIL:		
			OUO. DATE		31B. UNIT	ED STATES OF	AMERICA		31C. AW	ARD DATE

NSN 7540-01-155-3212 STANDARD FORM 1442 BACK (REV. 4-85)

TABLE OF CONTENTS

REQUEST FOR PROPOSAL FOR G2 INTELLIGENCE COMMAND AND HEADQUARTERS SECURITY BRIGADE KABUL, AFGHANISTAN

Section	<u>Title</u>
00010	Proposal Form
00100	Bidding Schedule/Instructors to Bidders
00110	Proposal Preparation
00120	Proposal Evaluation and Contract Award
00150	The Design-Build Process
00600	Representations and Certifications
00700	Contract Clauses
00800	Special Contract Clauses
01010	Scope of Work
01011	Design Concept Documents
01015	Technical Requirements
01060	Special Clauses
01312A	Quality Control System (QCS)
01321	Project Schedule
01335	Submittal Procedures for Design/Build Project
01415	Metric Measurements
01452	Contractor Quality Control
	APPENDIX

SECTION 00010 - BID PRICE SCHEDULE

PRICE SCHEDULE

1. Contract Administration: This contract administered by:

U.S. Army Corps of Engineers Afghanistan Engineer District ATTN: Qalaa House APO AE 09356

The Project Manager assigned to this project is Yolanda Melchert. Telephone number (540) 665-3447, cell phone 070 04 1094. The Contract Specialist assigned to this project is Mamie Anderson, Telephone number (540) 665-3467, cell phone 079 803 5806.

2. Payment Information: Payment shall be made in accordance with Contract Clause 52.232-5 entitled "Payments under Fixed Price Construction Contracts". The Resident Engineer shall submit ENG Form 93, Payment Estimate, to the address indicated to the attention of CEAED-PM/Yolanda Melchert.

Item No.	Description	Amount		
BASE PROPOSAL				
0001	Prepare Master Plan (01010 Paragraph 2.1)	\$		
0002	Prepare Designs and Drawings for All Base Bid and Optional Bid Items (01010 Paragraph 2.2)	\$		
0003	Provide Site/UXO Clearance (01010 Paragraph 2.3)	\$		
0004	Design and Construct Prime Power Plant and Electrical Distribution System (01010 Paragraph 2.4)	\$		
0005	Design and Construct Water System (01010 Paragraph 2.5)	\$		
0006	Design and Construct Sewer System (01010 Paragraph 2.6)	\$		
0007	Construct Site Drainage per Master Plan (01010 Paragraph 2.7)	\$		
0008	Design, Construct, Renovate Access Roads, Parking Areas and Parade Field (01010 Paragraph 2.8)	\$		

0009	Design and Construct Perimeter Wall and Two Gates (01010 Paragraph 2.9)	\$
0010	Design, Construct, and /or Renovate Guard Towers/Buildings (01010 Paragraph 2.10)	\$
0011	Renovate Entry Control Buildings (Buildings A, B, C) (01010 Paragraph 2.11)	\$
0012	Design and Construct DFAC Building (01010 Paragraph 2.12)	\$
0013	Design and Construct Headquarters Security Brigade (HSB) and ANA Band Complex (01010 Paragraph 2.13)	\$
0014	Design and Construct HSB Vehicle Maintenance Complex (01010 Paragraph 2.14)	\$
0015	Design and Construct G-2 Complex (01010 Paragraph 2.15)	\$
Total for Base	Proposal (Items 0001-0015):	\$
OPTIONAL B	ID ITEMS	
OPTIONAL B	Option 1: Design/Construct Additional Bachelor Officer Quarters (01010 Paragraph 3.1)	\$
	Option 1: Design/Construct Additional Bachelor Officer Quarters	\$ \$
0016	Option 1: Design/Construct Additional Bachelor Officer Quarters (01010 Paragraph 3.1) Option 2: Demolish Additional Buildings and Structures and Removal of Debris	
0016 0017	Option 1: Design/Construct Additional Bachelor Officer Quarters (01010 Paragraph 3.1) Option 2: Demolish Additional Buildings and Structures and Removal of Debris (01010 Paragraph 3.2) Option 3: Renovate Centralized Communications Hub and Underground Communication Conduits	\$
0016 0017 0018	Option 1: Design/Construct Additional Bachelor Officer Quarters (01010 Paragraph 3.1) Option 2: Demolish Additional Buildings and Structures and Removal of Debris (01010 Paragraph 3.2) Option 3: Renovate Centralized Communications Hub and Underground Communication Conduits (01010 Paragraph 3.3) Option 4: Design/Construct Communications Tower	\$ \$

0022	Option 7: Design/Construct Gym/Auditorium (01010 Paragraph 3.7)	\$	
0023	Option 8: Renovate G-2 Command Admin Building (01010 Paragraph 3.8)	\$	
0024	Option 9: Renovate Director of Public Works Building (01010 Paragraph 3.9)	\$	
0025	Option 10: Renovate Recreation Center, Library, and Market Building (01010 Paragraph 3.10)	\$	
0026	Option 11: Design/Construct Laundry Facility (01010 Paragraph 3.11)	\$	
0027	Option 12: Renovate Swimming Pool (01010 Paragraph 3.12)	\$	
0028	Option 13: Renovate Bunker (01010 Paragraph 3.13)	\$	
Total for All Options (Items 0016-0028):			
Total for Proposal: \$(Includes all items 0001-0028)			

PROPOSAL SCHEDULE NOTES

- 1. Offeror shall submit prices on all items.
- 2. Only one contract for the entire schedule will be awarded under this solicitation. This project will be awarded as a lump sum contract. This Proposal Schedule is an accounting tool for allocating funds to applicable budget. Costs associated with this project shall include design and construction costs for work described herein.
- 3. Separation of Work. All work shall be included in all Proposal Items.
- 4. Evaluation of Options. The Government will evaluate offers for pricing purposes by adding the total price for the option to the total price for the Base Proposal (Total Base Bid Proposal and Optional Bid Proposal Items). In addition prior to receipt of offers, the Government will determine the amount of funds available for the project. The proposal that represents the best overall value to the Government shall be determined through an evaluation between non-cost/price and cost/price aspects of the offerors' proposals. The technical aspects of the proposal shall be weighted higher than the price aspects of the proposal in this evaluation. Evaluation of options will not obligate the Government to exercise the options.
- Exercise of Optional Bid Items. Optional bid items (if any) may, at the option of the Government, be added to the contract at any time within 90 calendar days after Notice to Proceed (NTP).

-END OF SECTION-

SECTION 00110

PROPOSAL PREPARATION

PART 1-GENERAL

A. PROPOSAL PREPARATION. Instructions for the preparation and organization of each proposal are included herein. The proposal submittal shall include one original and five copies of the Volume I and one original and two copies of the Volume II proposal. The Volume II proposal shall be sealed in a single package separate from the Volume I proposals and both packages shall be clearly marked. The proposal shall be submitted as required herein and elsewhere in the RFP.

1. VOLUME I – MANAGEMENT-TECHNICAL PROPOSAL PREPARATION

- **1.1 Content.** The Management/Technical proposal shall include the information as described below and shall be presented in the sequence listed.
- **1.1.1 Factor 1 Experience/Past Performance.** Demonstrate the experience of the team, including subcontractors that will ensure successful completion of this facility using a design-build process. Provide a list of no more that five similar and relevant design-build projects underway or completed in the last five years that best demonstrates your experience. The list of projects shall include the following information:
 - Project name and location.
 - Nature of firm's responsibility (design, construction or both).
 - Project owner's name, address, telephone, email
 - Project completion date (actual or estimated)
 - Overall size of facility (in square feet or square meters)
 - Construction cost (excluding design costs)
 - Duration of design
 - Duration of construction (excluding design time)
 - Identify any of these projects delivered by design-build method
 - Brief explanation that illustrates your performance capabilities
 - Project Manager's (Point of Contact) name, telephone, email
 - Problems encountered and corrective actions taken
 - List of change orders and circumstances associated with them
 - Construction duration time growth in days
 - Construction cost growth in dollars
 - Safety record and accident report
- The offeror may also provide letters of recommendation, references, performance evaluations or other evidence of successful performance of the project.

Note: The Source Selection Evaluation Board may attempt to contact the project owner/project manager provided in the list of projects. Their comments will affect the scoring of proposals. It is important to verify that the points of contact listed are still available at the phone number and addresses provided and that they are individuals who have sufficient knowledge of the project and your performance to be able to offer meaningful comments.

1.1.2 Factor 2 - Project Management/Commitment. Provide a project management plan and an organizational chart that describes how the team will be structured, i.e., how many firms are involved and the specific role and responsibility of each firm for this project. Clearly indicate how all of the design and construction process will be managed including control quality throughout the construction process including testing, inspection, and safety. Demonstrate your understanding of the design-build process including your ability to effectively coordinate architectural and engineering professionals, sub-contractors and construction personnel in a team effort.

Indicate the level of detail you propose to employ for proper development of drawings and specifications. Present the role(s) that upper management will perform in this project and the process by which management issues encountered at the working level may be expeditiously elevated to and resolved by upper management. Describe interactions with the Corps of Engineers and the roles that different team members will play when dealing with design or construction changes, resolving potential delays, reviewing and approving submittals, attending progress meetings and facilitating quality control, contract completion on schedule and closeout.

1.1.3. Factor 3 – Personnel/Resource Commitment. Provide professional resume data on the following individuals who will be key personnel on the project team. Key personnel identified in this section should be senior working-level people who will be involved in design and construction on a day-to-day basis, as opposed to departmental level supervisors or executives. By identifying these personnel, the offeror makes a commitment that, barring unforeseen circumstances; they are the personnel who will be assigned to the project. All key personnel shall have a minimum of five years of professional experience.

- Project Manager for design and for construction
- Quality Control Manager
- Project Architect
- Senior Structural Engineer
- Senior Civil Engineer
- Senior Mechanical Engineer
- Senior Electrical Engineer
- Construction Superintendent
- Construction Foreman (if different from above)
- Name and title
- Project assignment
- Name of firm with which associated
- Years experience with this firm and with other firms
- Education degree(s), year, specialization
- Active registration, year first registered
- Other experience and qualifications relevant to the proposed project

Demonstrate personnel and resources to be utilized for this project as well as additional resources available if necessary. Include a list of key equipment resources. Include a list of key professional job titles and the number of personnel in each category for each key firm on the design-build team to include a resource manning chart and an estimate of how many personnel will be working primarily on this project from month to month.

1.2 Format

1.2.1 Volume I shall be typed, with numbered pages and sections tabbed. A cover sheet shall identify the offeror and the project and the second sheet shall be a table of contents. The Volume I proposal is limited to no more than 50 single-sided or 25 double-sided pages, printed on 8-1/2" x 11" or A4 sheets, not including the cover sheet and table of contents. Do not use condensed print. Do not submit any extraneous materials with your proposal.

2. VOLUME II - COST/PRICE PROPOSAL PREPARATION

- **2.1 Proposal Schedule.** Offerors shall provide a signed cover letter and complete the Proposal Schedule by filling out the pricing data blanks. An executable Proposal Schedule is included in Section 00010 herein. Overhead and profit shall be applied proportionally to each category and will not be required to be shown separately. The proposal shall include allowances in the Cost/Price Proposal and shall schedule any contingency for weather delays for severe weather in accordance with weather requirements. All costs and prices shall be firm.
- **2.2 Cost/Price Supporting Information.** In addition to the completed pricing schedule, the contractor shall provide supporting information in the way of cost breakdowns and assumptions made in determining the proposed

prices for this project. A written description of the proposed methods, techniques, approaches, assumptions, etc. shall be provided to assist the Government in evaluating the reasonableness and completeness of the proposed pricing.

B. CLARIFICATIONS AND FINAL PROPOSAL REVISION:

- C.1 General. Any conflicting criteria which cannot be resolved by the Order of Precedence specified in Section 555, DESIGN CONCEPT DOCUMENTS shall be brought to the attention of the Government by the offeror as part of the written clarification requirement of the proposal. In the absence of such request for clarification, the offeror shall perform to the most beneficial criteria as determined by the Government.
- C.2 Clarifications Prior to Proposal Due Date. In the event that clarifications are required prior to submitting the proposal, contact the individuals listed on the RFP letter. All RFP holders will be advised of significant clarifications affecting the scope of the project.
- C.3 Clarifications Submitted with Proposals. If clarifications remain at the time and date that proposals are due, written clarifications may be included in the proposal for consideration by the Government. Clarifications submitted with proposals shall clearly identify the understanding of the RFP documents and how this understanding is reflected in the cost proposal. Extensive qualifications, exclusions and exceptions in the form of clarifications may be considered by the Government to be non-responsive and may be grounds for rejection of the proposal.

C.4 Final Proposal Revision(s):

- C.4.1 The Government intends to award a contract on the basis of the initial offers received without further discussions or negotiations. Offers should contain the offeror's best terms from a cost and management standpoint.
- C.4.2 The Government may contact those firms whose proposals are within the competitive range and conduct discussions/negotiations concerning their proposal. Following resolution of the discussions/negotiations, offerors in the competitive range shall be given the opportunity to submit their Final Proposal Revision (otherwise known as 'Best and Final offer').

PART 2 - PRODUCTS (NOT APPLICABLE)

PART 3 - EXECUTION (NOT APPLICABLE)

-- End of Section --

SECTION 00120

PROPOSAL EVALUATION AND CONTRACT AWARD

PART 1 – GENERAL

A. BASIS FOR AWARD. The Government intends to make one award for completion of the subject project. The award will be made to the offeror whose proposal represents the best overall value to the Government. Competing proposals shall be evaluated against the requirements of the solicitation in order to assess strengths, weaknesses and associated risks and deficiencies. The tradeoff process of evaluation between non-cost/price and cost/price aspects of the offerors' proposals will be used to determine those offers that may result in award of a contract. Implicit in the Government's evaluation and selection process is its willingness to accept other than the lowest priced offers.

B. PROPOSAL EVALUATION.

- B.1 Proposals will be evaluated by a Source Selection Evaluation Board (SSEB). The SSEB will be composed of Corps of Engineers personnel and possibly a customer representative. The identity of SSEB members is confidential and members will not be available for contact or discussion prior to submission of proposals.
- B.2 The Volume I (Management/Technical) factors are listed in descending order of importance. The factors will be evaluated and assigned merit ratings using the adjectives of excellent (E), good (G), satisfactory (S), marginal (M), and unsatisfactory (U). Risk assessment confidence ratings will be assigned based upon the adjective ratings of low (L) confidence (high risk), medium (M) confidence (medium risk), or high confidence (H) (low risk). The non-pricing Volume (I, Management-Technical) taken together have equal weight to the pricing factor (Volume II) in the evaluation and selection process.

1. VOLUME 1 – MANAGEMENT-TECHNICAL PROPOSAL EVALUATION CRITERIA. 1.1 Content

- 1.1.1 Factor 1 Experience/Past Performance. The Government will evaluate the experience and ability of the contractor and the proposed team, including subcontractors, to successfully complete these facilities using a design-build process. Contractor experience with similar relevant projects (type of construction, dollar value, design-build method, complexity) will receive a higher rating than those with dissimilar or non-relevant projects. Past performance may be evaluated by contacting references for indications of customer satisfaction and review of performance evaluations or other information provided by the offeror or obtained by the Government. The evaluators will consider the relevance of the past performance information, as well as the success achieved on past projects to determine the rating. Proposals with the most convincing evidence will receive the highest ratings.
- 1.1.2 Factor 2 Project Management/Commitment. The evaluators will evaluate and rate the project management plan including the team structure and responsibilities of team members, the management approach for the design and construction process, including effective coordination between design and construction personnel; the quality control process; the level of detail proposed for drawings and specs; and the offeror's construction management philosophy as it relates to the design-build process. The Government will evaluate the offeror's plan to control quality throughout the design development and construction of the project; the contractor's management commitment and issue resolution processes; and the offeror's commitment to control cost growth by maintaining the project budget during design and construction, review of cost control systems and procedures, cost savings proposals, plans to minimize cost overruns and plan to maximize user requirements while minimizing or

maintaining costs. The evaluators will rate the offerors commitment to interact with the Corps of Engineers and the roles that the team members will have in dealing with design and construction changes, resolving potential delays, reviewing and approving submittals, attending progress meetings and facilitating contract completion and closeout. Proposals with the most convincing evidence will receive the highest ratings.

- 1.1.3 Factor 3 Personnel/Resource Commitment. The Government will evaluate the qualifications and experience of the proposed project personnel and the commitment to participate in this project and other resources to successfully complete the project. Contractor personnel with experience with similar relevant projects (type of construction, dollar value, design-build method, complexity) will receive a higher rating than those with dissimilar or non-relevant project experience. Proposals with the most convincing evidence will receive the highest ratings.
- **1.2 Format.** Proposal will be evaluated based on adherence to format requirements of Section 00110, Proposal Preparation.
- 2. VOLUME II COST/PRICE PROPOSAL PREPARATION. The Government will evaluate whether the Volume II cost/price proposals are complete and reasonable. The cost/price proposals will not be assigned adjective ratings but will be assigned a confidence/risk rating. The government will evaluate the proposed pricing and supporting information to determine the reasonableness and completeness of the proposed price.

C. METHOD OF PROPOSAL EVALUATION

- **C.1** Proposals will be reviewed to determine if they contain the required minimum procurement and technical data. Incomplete proposals may be eliminated. All forms shall be filled in and all requested data must be provided.
- **C.2** After the compliance review, the SSEB will begin evaluation and scoring the factors and sub-factors set forth herein. The Cost/Price proposal information will be evaluated (not scored) with regard to reasonable and complete pricing and associated risks.
- **C.3** If necessary, a competitive range may be determined. The competitive range will consist of all proposals which are considered to have a reasonable chance of being selected for award. However, the offeror is reminded that the Government intends to award without discussions and that their best offer should be provided with the initial proposal. After the determination of the competitive range, written and/or oral discussions may be conducted with all offerors within the competitive range. Upon completion of written and/or oral discussions, Final Proposal Revision will be requested.
- **C.4** The Government may reject any or all proposals and waive minor informalities or minor irregularities in proposals.
- **D. SELECTION and AWARD.** Award will be made to the offeror that, in the judgment of the Contracting Officer, provides the best combination of management and technical capability and reasonable cost. The Government reserves the right to make award to other than the lowest cost offeror, price and other factors considered.

PART 2 - PRODUCTS (NOT APPLICABLE) (PART 3 - EXECUTION (NOT APPLICABLE)

SECTION 00150

THE DESIGN/BUILD PROCESS

PART 1 - GENERAL

1. DESIGN/BUILD (DB) PROCESS

The facility shall be designed and built by a single DB contractor. The DB contractor may be a single firm or a team of firms that includes registered Architects and Engineers either employed by or subcontracted to the DB contractor. The DB contractor is the Architect/Engineer-of-Record, whether the DB contractor uses registered architects and engineers employed by its firm or subcontracts with independent architectural and engineering firm(s). The DB contractor is solely liable for design errors and/or omissions and must be insured as the designer against design errors and omissions.

2. OUTLINE DESCRIPTION OF THE DB PHASE

No work can begin on any phase of the process until an authorization Letter to Commence for that phase is issued.

2.1 PROPOSAL PHASE

The Proposal Phase includes the period from the time from the issuance of the Request for Proposals (RFP) through the selection process and the final award of the DB contract.

The proposals to be submitted include a Management/Technical Proposal, a Preliminary Design Proposal, and a Cost/Price Proposal. The contents and organization of the proposal is described in SECTION 00110 - PROPOSAL PREPARATION. The Government will evaluate and award the DB contract to a single Offeror based upon the criteria which are outlined in SECTION 00120 - PROPOSAL EVALUATION AND CONTRACT AWARD.

2.2 DESIGN PHASE

The successful DB contractor shall develop and submit for review two submittals, first and second. The DB contractor is encouraged to develop and submit multiple cost saving proposals for innovative design alternatives.

2.2.1 The Design Phase will consist of two parts as follows:

The successful DB contractor shall develop and submit for review two submittals, first and second. The DB contractor is encouraged to develop and submit multiple cost saving proposals for innovative design alternatives.

2.2.1 The Design Phase will consist of two parts as follows:

a. Part 1 will be the basic services required to develop the first submittal which represents: 100% complete drawings and specifications for site preparation work, utility construction, paving, foundation, and structural diaphragm of all work and approximately 35% and 65% complete drawings and specifications of all other required construction documents. Part I also includes incorporating the revisions identified in the first and second submittal reviews.

After approval of the Part 1 drawings and specification submittal, the Government may issue a Letter of Authorization to commence with the Build Phase for all site and off-site utilities, clearing, grubbing, rough grading the site, demolition work, parking lot base course, foundation, and structural framing

- a. Pre-design meeting will be conducted to distribute as-built drawings to the DB contractor, finalize and clarify technical information, and clarify other necessary information.
- b. Part 2 shall include all design services required to complete the second design submittal (65%). Part 2 design shall not begin until an approval of the Part 1 submittal is issued.
- c. Part 3 shall include all design services required to complete the third design submittal (95%). Part 3 design shall not begin until an approval of the Part 2 submittal is issued.
- d. Part 4 shall include all design services required to complete the third design submittal (100%). Part 4 design shall not begin until an approval of the Part 3 submittal is issued.

3. BUILD PHASE

The Build Phase will be initiated by an authorization letter.

The authorization letter will be provided separately by the Contracting Officer for each phase of the work. The Government may give the DB Contractor authorization for the Build Phase for portions of the work following review and approval of the First Design Submittal.

Weekly coordination meetings will be held at which, as a minimum, the DB Contractor's Project Manager, a representative of the Designer, the site Superintendent, and the Contractor's Quality Control Manager shall be present.

4. PROJECT SCHEDULE

The following is a suggested internal design schedule and is subject to modification by the Offeror to suit their particular method of operation. Overall time constraints are required and cannot be changed except by contract modification. Prospective offerors shall be required to submit a complete schedule for design and construction that meets or exceeds the overall time goals of the Government for this project.

Notice to Proceed 7 days follows:	wing Award of Contract (upon written
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notification)

Design Phase, Part 1 – Basic 7 days from Award of Contract Services Pre-design Meeting

CESA (*) and Utility studies due 30 days after Award of Contract

(if required)

* CESA (Computer Energy Study/Analysis)

Study Review meeting 7 days after submission of study

(if study is required-location TBD)

First Design Submittal Due 60 days following Notice to Proceed

(site design at 35% completion level)

Submittal Review Conference 7 days after 35% submittal

(Kabul, Afghanistan)

Authorization to Commence Design Phase Upon approval of first design submittal Part 2 Build Phase authorization to commence Upon approval of corrected first design submittal Second Design Submittal Due 100 days following Notice to Proceed (design at 65% completion level) Submittal Review Conference 7 days after 65% submittal (Kabul, Afghanistan) Third Design Submittal Due 130 days following Notice to Proceed (design at 95% completion level) Submittal Review Conference 7 days following 95% submittal (Kabul, Afghanistan) **Incorporate Changes to Submittals** 10 days following review conference Re-Submit for Review and Approval 150 days following Notice to Proceed Third Design Submittal Due (100% completion level) **Incorporate Changes to Submittals** 5 days following 100% review conference Re-Submit for Review and Approval **Build Phase Authorization for Remainder** Upon approval of fourth submittal of Work Construction: ** **Base Proposal Construction** Total Design and Construction Period ** (performance period includes design and construction phases) All days are in calendar days.

---End of Section---

** Refer to Section 01010 for Performance Period.

Section 00100 - Bidding Schedule/Instructions to Bidders

CLAUSES INCORPORATED BY FULL TEXT

52.204-7 CENTRAL CONTRACTOR REGISTRATION (OCT 2003)

(a) Definitions. As used in this clause--

Central Contractor Registration (CCR) database means the primary Government repository for Contractor information required for the conduct of business with the Government.

Data Universal Numbering System (DUNS) number means the 9-digit number assigned by Dun and Bradstreet, Inc. (D&B) to identify unique business entities.

Data Universal Numbering System +4 (DUNS+4) number means the DUNS number assigned by D&B plus a 4-character suffix that may be assigned by a business concern. (D&B has no affiliation with this 4-character suffix.) This 4-character suffix may be assigned at the discretion of the business concern to establish additional CCR records for identifying alternative Electronic Funds Transfer (EFT) accounts (see the FAR at Subpart 32.11) for the same parent concern.

Registered in the CCR database means that--

- (1) The Contractor has entered all mandatory information, including the DUNS number or the DUNS+4 number, into the CCR database; and
- (2) The Government has validated all mandatory data fields and has marked the record "Active".
- (b)(1) By submission of an offer, the offeror acknowledges the requirement that a prospective awardee shall be registered in the CCR database prior to award, during performance, and through final payment of any contract, basic agreement, basic ordering agreement, or blanket purchasing agreement resulting from this solicitation.
- (2) The offeror shall enter, in the block with its name and address on the cover page of its offer, the annotation "DUNS" or "DUNS +4" followed by the DUNS or DUNS +4 number that identifies the offeror's name and address exactly as stated in the offer. The DUNS number will be used by the Contracting Officer to verify that the offeror is registered in the CCR database.
- (c) If the offeror does not have a DUNS number, it should contact Dun and Bradstreet directly to obtain one.
- (1) An offeror may obtain a DUNS number--
- (i) If located within the United States, by calling Dun and Bradstreet at 1-866-705-5711 or via the Internet at http://www.dnb.com; or
- (ii) If located outside the United States, by contacting the local Dun and Bradstreet office.
- (2) The offeror should be prepared to provide the following information:
- (i) Company legal business.
- (ii) Tradestyle, doing business, or other name by which your entity is commonly recognized.
- (iii) Company Physical Street Address, City, State, and Zip Code.

- (iv) Company Mailing Address, City, State and Zip Code (if separate from physical).
- (v) Company Telephone Number.
- (vi) Date the company was started.
- (vii) Number of employees at your location.
- (viii) Chief executive officer/key manager.
- (ix) Line of business (industry).
- (x) Company Headquarters name and address (reporting relationship within your entity).
- (d) If the Offeror does not become registered in the CCR database in the time prescribed by the Contracting Officer, the Contracting Officer will proceed to award to the next otherwise successful registered Offeror.
- (e) Processing time, which normally takes 48 hours, should be taken into consideration when registering. Offerors who are not registered should consider applying for registration immediately upon receipt of this solicitation.
- (f) The Contractor is responsible for the accuracy and completeness of the data within the CCR database, and for any liability resulting from the Government's reliance on inaccurate or incomplete data. To remain registered in the CCR database after the initial registration, the Contractor is required to review and update on an annual basis from the date of initial registration or subsequent updates its information in the CCR database to ensure it is current, accurate and complete. Updating information in the CCR does not alter the terms and conditions of this contract and is not a substitute for a properly executed contractual document.
- (g)(1)(i) If a Contractor has legally changed its business name, "doing business as" name, or division name (whichever is shown on the contract), or has transferred the assets used in performing the contract, but has not completed the necessary requirements regarding novation and change-of-name agreements in Subpart 42.12, the Contractor shall provide the responsible Contracting Officer a minimum of one business day's written notification of its intention to (A) change the name in the CCR database; (B) comply with the requirements of Subpart 42.12 of the FAR; and (C) agree in writing to the timeline and procedures specified by the responsible Contracting Officer. The Contractor must provide with the notification sufficient documentation to support the legally changed name.
- (ii) If the Contractor fails to comply with the requirements of paragraph (g)(1)(i) of this clause, or fails to perform the agreement at paragraph (g)(1)(i)(C) of this clause, and, in the absence of a properly executed novation or change-of-name agreement, the CCR information that shows the Contractor to be other than the Contractor indicated in the contract will be considered to be incorrect information within the meaning of the "Suspension of Payment" paragraph of the electronic funds transfer (EFT) clause of this contract.
- (2) The Contractor shall not change the name or address for EFT payments or manual payments, as appropriate, in the CCR record to reflect an assignee for the purpose of assignment of claims (see FAR Subpart 32.8, Assignment of Claims). Assignees shall be separately registered in the CCR database. Information provided to the Contractor's CCR record that indicates payments, including those made by EFT, to an ultimate recipient other than that Contractor will be considered to be incorrect information within the meaning of the "Suspension of payment" paragraph of the EFT clause of this contract.
- (h) Offerors and Contractors may obtain information on registration and annual confirmation requirements via the internet at http://www.ccr.gov or by calling 1-888-227-2423, or 269-961-5757.

(End of clause)

52.214-34 SUBMISSION OF OFFERS IN THE ENGLISH LANGUAGE (APR 1991)

Offers submitted in response to this solicitation shall be in the English language. Offers received in other than English shall be rejected.

(End of provision)

52.214-35 SUBMISSION OF OFFERS IN U.S. CURRENCY (APR 1991)

Offers submitted in response to this solicitation shall be in terms of U.S. dollars. Offers received in other than U.S. dollars shall be rejected.

(End of provision)

52.214-5000 APPARENT CLERICAL MISTAKES (MAR 1995) -- EFARS

- (a) For the purpose of initial evaluations of bids, the following will be utilized in the resolving arithmetic discrepancies found on the face of bidding schedule as submitted by the bidder:
 - (1) Obviously misplaced decimal points will be corrected;
- (2) Discrepancy between unit price and extended price, the unit price will govern;
 - (3) Apparent errors in extension of unit prices will be corrected;
- (4) Apparent errors in addition of lump-sum and extended prices will be corrected.
- (b) For the purpose of bid evaluation, the government will proceed on the assumption that the bidder intends his bid to be evaluated on basis of the unit prices, the totals arrived at by resolution of arithmetic discrepancies as provided above and the bid will be so reflected on the abstract of bids.
- (c) These correction procedures shall not be used to resolve any ambiguity concerning which bid is low.

(End of statement)

52.215-1 INSTRUCTIONS TO OFFERORS--COMPETITIVE ACQUISITION (JAN 2004)

(a) Definitions. As used in this provision--

"Discussions" are negotiations that occur after establishment of the competitive range that may, at the Contracting Officer's discretion, result in the offeror being allowed to revise its proposal.

"In writing or written" means any worded or numbered expression which can be read, reproduced, and later communicated, and includes electronically transmitted and stored information.

"Proposal modification" is a change made to a proposal before the solicitation's closing date and time, or made in response to an amendment, or made to correct a mistake at any time before award.

"Proposal revision" is a change to a proposal made after the solicitation closing date, at the request of or as allowed by a Contracting Officer as the result of negotiations.

- "Time", if stated as a number of days, is calculated using calendar days, unless otherwise specified, and will include Saturdays, Sundays, and legal holidays. However, if the last day falls on a Saturday, Sunday, or legal holiday, then the period shall include the next working day.
- (b) Amendments to solicitations. If this solicitation is amended, all terms and conditions that are not amended remain unchanged. Offerors shall acknowledge receipt of any amendment to this solicitation by the date and time specified in the amendment(s).
- (c) Submission, modification, revision, and withdrawal of proposals. (1) Unless other methods (e.g., electronic commerce or facsimile) are permitted in the solicitation, proposals and modifications to proposals shall be submitted in paper media in sealed envelopes or packages (i) addressed to the office specified in the solicitation, and (ii) showing the time and date specified for receipt, the solicitation number, and the name and address of the offeror. Offerors using commercial carriers should ensure that the proposal is marked on the outermost wrapper with the information in paragraphs (c)(1)(i) and (c)(1)(ii) of this provision.
- (2) The first page of the proposal must show--
- (i) The solicitation number;
- (ii) The name, address, and telephone and facsimile numbers of the offeror (and electronic address if available);
- (iii) A statement specifying the extent of agreement with all terms, conditions, and provisions included in the solicitation and agreement to furnish any or all items upon which prices are offered at the price set opposite each item:
- (iv) Names, titles, and telephone and facsimile numbers (and electronic addresses if available) of persons authorized to negotiate on the offeror's behalf with the Government in connection with this solicitation; and
- (v) Name, title, and signature of person authorized to sign the proposal. Proposals signed by an agent shall be accompanied by evidence of that agent's authority, unless that evidence has been previously furnished to the issuing office.
- (3) Submission, modification, or revision, of proposals.
- (i) Offerors are responsible for submitting proposals, and any modifications, or revisions, so as to reach the Government office designated in the solicitation by the time specified in the solicitation. If no time is specified in the solicitation, the time for receipt is 4:30 p.m., local time, for the designated Government office on the date that proposal or revision is due.
- (ii)(A) Any proposal, modification, or revision received at the Government office designated in the solicitation after the exact time specified for receipt of offers is "late" and will not be considered unless it is received before award is made, the Contracting Officer determines that accepting the late offer would not unduly delay the acquisition; and-
- (1) If it was transmitted through an electronic commerce method authorized by the solicitation, it was received at the initial point of entry to the Government infrastructure not later than 5:00 p.m. one working day prior to the date specified for receipt of proposals; or
- (2) There is acceptable evidence to establish that it was received at the Government installation designated for receipt of offers and was under the Government's control prior to the time set for receipt of offers; or
- (3) It is the only proposal received.

- (B) However, a late modification of an otherwise successful proposal that makes its terms more favorable to the Government, will be considered at any time it is received and may be accepted.
- (iii) Acceptable evidence to establish the time of receipt at the Government installation includes the time/date stamp of that installation on the proposal wrapper, other documentary evidence of receipt maintained by the installation, or oral testimony or statements of Government personnel.
- (iv) If an emergency or unanticipated event interrupts normal Government processes so that proposals cannot be received at the office designated for receipt of proposals by the exact time specified in the solicitation, and urgent Government requirements preclude amendment of the solicitation, the time specified for receipt of proposals will be deemed to be extended to the same time of day specified in the solicitation on the first work day on which normal Government processes resume.
- (v) Proposals may be withdrawn by written notice received at any time before award. Oral proposals in response to oral solicitations may be withdrawn orally. If the solicitation authorizes facsimile proposals, proposals may be withdrawn via facsimile received at any time before award, subject to the conditions specified in the provision at 52.215-5, Facsimile Proposals. Proposals may be withdrawn in person by an offeror or an authorized representative, if the identity of the person requesting withdrawal is established and the person signs a receipt for the proposal before award.
- (4) Unless otherwise specified in the solicitation, the offeror may propose to provide any item or combination of items.
- (5) Offerors shall submit proposals in response to this solicitation in English, unless otherwise permitted by the solicitation, and in U.S. dollars, unless the provision at FAR 52.225-17, Evaluation of Foreign Currency Offers, is included in the solicitation.
- (6) Offerors may submit modifications to their proposals at any time before the solicitation closing date and time, and may submit modifications in response to an amendment, or to correct a mistake at any time before award.
- (7) Offerors may submit revised proposals only if requested or allowed by the Contracting Officer.
- (8) Proposals may be withdrawn at any time before award. Withdrawals are effective upon receipt of notice by the Contracting Officer.
- (d) Offer expiration date. Proposals in response to this solicitation will be valid for the number of days specified on the solicitation cover sheet (unless a different period is proposed by the offeror).
- (e) Restriction on disclosure and use of data. Offerors that include in their proposals data that they do not want disclosed to the public for any purpose, or used by the Government except for evaluation purposes, shall--
- (1) Mark the title page with the following legend: This proposal includes data that shall not be disclosed outside the Government and shall not be duplicated, used, or disclosed--in whole or in part--for any purpose other than to evaluate this proposal. If, however, a contract is awarded to this offeror as a result of--or in connection with-- the submission of this data, the Government shall have the right to duplicate, use, or disclose the data to the extent provided in the resulting contract. This restriction does not limit the Government's right to use information contained in this data if it is obtained from another source without restriction. The data subject to this restriction are contained in sheets [insert numbers or other identification of sheets]; and
- (2) Mark each sheet of data it wishes to restrict with the following legend: Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this proposal.
- (f) Contract award. (1) The Government intends to award a contract or contracts resulting from this solicitation to the responsible offeror(s) whose proposal(s) represents the best value after evaluation in accordance with the factors

and subfactors in the solicitation.

- (2) The Government may reject any or all proposals if such action is in the Government's interest.
- (3) The Government may waive informalities and minor irregularities in proposals received.
- (4) The Government intends to evaluate proposals and award a contract without discussions with offerors (except clarifications as described in FAR 15.306(a)). Therefore, the offeror's initial proposal should contain the offeror's best terms from a cost or price and technical standpoint. The Government reserves the right to conduct discussions if the Contracting Officer later determines them to be necessary. If the Contracting Officer determines that the number of proposals that would otherwise be in the competitive range exceeds the number at which an efficient competition can be conducted, the Contracting Officer may limit the number of proposals in the competitive range to the greatest number that will permit an efficient competition among the most highly rated proposals.
- (5) The Government reserves the right to make an award on any item for a quantity less than the quantity offered, at the unit cost or prices offered, unless the offeror specifies otherwise in the proposal.
- (6) The Government reserves the right to make multiple awards if, after considering the additional administrative costs, it is in the Government's best interest to do so.
- (7) Exchanges with offerors after receipt of a proposal do not constitute a rejection or counteroffer by the Government.
- (8) The Government may determine that a proposal is unacceptable if the prices proposed are materially unbalanced between line items or subline items. Unbalanced pricing exists when, despite an acceptable total evaluated price, the price of one or more contract line items is significantly overstated or understated as indicated by the application of cost or price analysis techniques. A proposal may be rejected if the Contracting Officer determines that the lack of balance poses an unacceptable risk to the Government.
- (9) If a cost realism analysis is performed, cost realism may be considered by the source selection authority in evaluating performance or schedule risk.
- (10) A written award or acceptance of proposal mailed or otherwise furnished to the successful offeror within the time specified in the proposal shall result in a binding contract without further action by either party.
- (11) If a post-award debriefing is given to requesting offerors, the Government shall disclose the following information, if applicable:
- (i) The agency's evaluation of the significant weak or deficient factors in the debriefed offeror's offer.
- (ii) The overall evaluated cost or price and technical rating of the successful and the debriefed offeror and past performance information on the debriefed offeror.
- (iii) The overall ranking of all offerors, when any ranking was developed by the agency during source selection.
- (iv) A summary of the rationale for award.
- (v) For acquisitions of commercial items, the make and model of the item to be delivered by the successful offeror.
- (vi) Reasonable responses to relevant questions posed by the debriefed offeror as to whether source-selection procedures set forth in the solicitation, applicable regulations, and other applicable authorities were followed by the agency.

(End of provision)

52.216-1 TYPE OF CONTRACT (APR 1984)

The Government contemplates award of a **FIRM-FIXED PRICE** contract resulting from this solicitation.

(End of clause)

52.217-5 EVALUATION OF OPTIONS (JUL 1990)

Except when it is determined in accordance with FAR 17.206(b) not to be in the Government's best interests, the Government will evaluate offers for award purposes by adding the total price for all options to the total price for the basic requirement. Evaluation of options will not obligate the Government to exercise the option(s).

(End of provision)

52.223-5 POLLUTION PREVENTION AND RIGHT-TO-KNOW INFORMATION (AUG 2003)

(a) Definitions. As used in this clause--

Priority chemical means a chemical identified by the Interagency Environmental Leadership Workgroup or, alternatively, by an agency pursuant to section 503 of Executive Order 13148 of April 21, 2000, Greening the Government through Leadership in Environmental Management.

"Toxic chemical means a chemical or chemical category listed in 40 CFR 372.65."

- (b) Executive Order 13148 requires Federal facilities to comply with the provisions of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (42 U.S.C. 11001-11050) and the Pollution Prevention Act of 1990 (PPA) (42 U.S.C. 13101-13109).
- (c) The Contractor shall provide all information needed by the Federal facility to comply with the following:
- (1) The emergency planning reporting requirements of section 302 of EPCRA.
- (2) The emergency notice requirements of section 304 of EPCRA.
- (3) The list of Material Safety Data Sheets, required by section 311 of EPCRA.
- (4) The emergency and hazardous chemical inventory forms of section 312 of EPCRA.
- (5) The toxic chemical release inventory of section 313 of EPCRA, which includes the reduction and recycling information required by section 6607 of PPA.
- (6) The toxic chemical, priority chemical, and hazardous substance release and use reduction goals of sections 502 and 503 of Executive Order 13148.

(End of clause)

52.225-12 NOTICE OF BUY AMERICAN ACT REQUIREMENT-- CONSTRUCTION MATERIALS UNDER TRADE AGREEMENTS (JAN 2005)

- (a) Definitions. ``Construction material," ``designated country construction material," ``domestic construction material," and ``foreign construction material," as used in this provision, are defined in the clause of this solicitation entitled ``Buy American Act--Construction Materials Under Trade Agreements" (Federal Acquisition Regulation (FAR) clause 52.225-11).
- (b) Requests for determination of inapplicability. An offeror requesting a determination regarding the inapplicability of the Buy American Act should submit the request to the Contracting Officer in time to allow a determination before submission of offers. The offeror shall include the information and applicable supporting data required by paragraphs (c) and (d) of FAR clause 52.225-11 in the request. If an offeror has not requested a determination regarding the inapplicability of the Buy American Act before submitting its offer, or has not received a response to a previous request, the offeror shall include the information and supporting data in the offer.
- (c) Evaluation of offers. (1) The Government will evaluate an offer requesting exception to the requirements of the Buy American Act, based on claimed unreasonable cost of domestic construction materials, by adding to the offered price the appropriate percentage of the cost of such foreign construction material, as specified in paragraph (b)(4)(i) of FAR clause 52.225-11.
- (2) If evaluation results in a tie between an offeror that requested the substitution of foreign construction material based on unreasonable cost and an offeror that did not request an exception, the Contracting Officer will award to the offeror that did not request an exception based on unreasonable cost.
- (d) Alternate offers. (1) When an offer includes foreign construction material, other than designated country construction material, that is not listed by the Government in this solicitation in paragraph (b)(3) of FAR clause 52.225-11, the offeror also may submit an alternate offer based on use of equivalent domestic or designated country construction material.
- (2) If an alternate offer is submitted, the offeror shall submit a separate Standard Form 1442 for the alternate offer, and a separate price comparison table prepared in accordance with paragraphs (c) and (d) of FAR clause 52.225-11 for the offer that is based on the use of any foreign construction material for which the Government has not yet determined an exception applies.
- (3) If the Government determines that a particular exception requested in accordance with paragraph (c) of FAR clause 52.225-11 does not apply, the Government will evaluate only those offers based on use of the equivalent domestic or designated country construction material, and the offeror shall be required to furnish such domestic or designated country construction material. An offer based on use of the foreign construction material for which an exception was requested—(i) Will be rejected as nonresponsive if this acquisition is conducted by sealed bidding; or
- (ii) May be accepted if revised during negotiations.

(End of provision)

52.232-38 SUBMISSION OF ELECTRONIC FUNDS TRANSFER INFORMATION WITH OFFER (MAY 1999)

The offeror shall provide, with its offer, the following information that is required to make payment by electronic funds transfer (EFT) under any contract that results from this solicitation. This submission satisfies the requirement

to provide EFT information under paragraphs (b)(1) and (j) of the clause at 52.232-34, Payment by Electronic Funds Transfer--Other than Central Contractor Registration.

- (1) The solicitation number (or other procurement identification number).
- (2) The offeror's name and remittance address, as stated in the offer.
- (3) The signature (manual or electronic, as appropriate), title, and telephone number of the offeror's official authorized to provide this information.
- (4) The name, address, and 9-digit Routing Transit Number of the offeror's financial agent.
- (5) The offeror's account number and the type of account (checking, savings, or lockbox).
- (6) If applicable, the Fedwire Transfer System telegraphic abbreviation of the offeror's financial agent.
- (7) If applicable, the offeror shall also provide the name, address, telegraphic abbreviation, and 9-digit Routing Transit Number of the correspondent financial institution receiving the wire transfer payment if the offeror's financial agent is not directly on-line to the Fedwire and, therefore, not the receiver of the wire transfer payment.

(End of provision)

52.233-2 SERVICE OF PROTEST (AUG 1996)

- (a) Protests, as defined in section 33.101 of the Federal Acquisition Regulation, that are filed directly with an agency, and copies of any protests that are filed with the General Accounting Office (GAO), shall be served on the Contracting Officer (addressed as follows) by obtaining written and dated acknowledgment of receipt from U. S. Army Corps of Engineers, House 1, Street 1, West Wazir Kakbarkhan (behind Aman High School), Kabul, Afghanistan.
- (b) The copy of any protest shall be received in the office designated above within one day of filing a protest with the GAO.

(End of provision)

52.236-27 SITE VISIT (CONSTRUCTION) (FEB 1995) – ALTERNATE I (FEB 1995)

- (a) The clauses at 52.236-2, Differing Site Conditions, and 52.236-3, Site Investigations and Conditions Affecting the Work, will be included in any contract awarded as a result of this solicitation. Accordingly, offerors or quoters are urged and expected to inspect the site where the work will be performed.
- (b) An organized site visit has been scheduled for--

JUNE 5, 2006, 9:00 A.M. LOCAL TIME

(c) Participants will meet at-U. S. Army Corps of Engineers, House 1, Street 1, West Wazir Kakbarkhan (behind Aman High School) Kabul, Afghanistan

(End of provision)

52.236-28 PREPARATION OF PROPOSALS--CONSTRUCTION (OCT 1997)

- (a) Proposals must be (1) submitted on the forms furnished by the Government or on copies of those forms, and (2) manually signed. The person signing a proposal must initial each erasure or change appearing on any proposal form.
- (b) The proposal form may require offerors to submit proposed prices for one or more items on various bases, including--
- (1) Lump sum price;
- (2) Alternate prices;
- (3) Units of construction; or
- (4) Any combination of paragraphs (b)(1) through (b)(3) of this provision.
- (c) If the solicitation requires submission of a proposal on all items, failure to do so may result in the proposal being rejected without further consideration. If a proposal on all items is not required, offerors should insert the words "no proposal" in the space provided for any item on which no price is submitted.
- (d) Alternate proposals will not be considered unless this solicitation authorizes their submission.

(End of provision)

52.252-5 AUTHORIZED DEVIATIONS IN PROVISIONS (APR 1984)

- (a) The use in this solicitation of any Federal Acquisition Regulation (48 CFR Chapter 1) provision with an authorized deviation is indicated by the addition of "(DEVIATION)" after the date of the provision.
- (b) The use in this solicitation of any <u>Defense FAR Supplement</u> (48 CFR Chapter <u>2</u>) provision with an authorized deviation is indicated by the addition of "(DEVIATION)" after the name of the regulation.

(End of provision)

252.204-7001 COMMERCIAL AND GOVERNMENT ENTITY (CAGE) CODE REPORTING (AUG 1999)

- (a) The offeror is requested to enter its CAGE code on its offer in the block with its name and address. The CAGE code entered must be for that name and address. Enter "CAGE" before the number.
- (b) If the offeror does not have a CAGE code, it may ask the Contracting Officer to request one from the Defense Logistics Information Service (DLIS). The Contracting Officer will--
- (1) Ask the Contractor to complete section B of a DD Form 2051, Request for Assignment of a Commercial and Government Entity (CAGE) Code;
- (2) Complete section A and forward the form to DLIS; and

- (3) Notify the Contractor of its assigned CAGE code.
- (c) Do not delay submission of the offer pending receipt of a CAGE code.

(End of provision)

252.209-7002 DISCLOSURE OF OWNERSHIP OR CONTROL BY A FOREIGN GOVERNMENT (JUN 2005)

- (a) Definitions. As used in this provision--
- (1) "Entity controlled by a foreign government" means--
- (i) Any domestic or foreign organization or corporation that is effectively owned or controlled by a foreign government; or
- (ii) Any individual acting on behalf of a foreign government.
- (2) "Effectively owned or controlled" means that a foreign government or any entity controlled by a foreign government has the power, either directly or indirectly, whether exercised or exercisable, to control or influence the election or appointment of the Offeror's officers, directors, partners, regents, trustees, or a majority of the Offeror's board of directors by means, e.g., ownership, contract, or operation of law.
- (3) Foreign government includes the state and the government of any country (other than the United States and its outlying areas) as well as any political subdivision, agency, or instrumentality thereof.
- (4) "Proscribed information" means--
- (i) Top Secret information;
- (ii) Communications Security (COMSEC) information, except classified keys used to operate secure telephone unites (STU IIIs);
- (iii) Restricted Data as defined in the U.S. Atomic Energy Act of 1954, as amended;
- (iv) Special Access Program (SAP) information; or
- (v) Sensitive Compartmental Information (SCI).
- (b) Prohibition on award. No contract under a national security program may be awarded to a company owned by an entity controlled by a foreign government if that company requires access to proscribed information to perform the contract, unless the Secretary of Defense or designee has waived application of 10 U.S.C.2536(a).
- (c) Disclosure.

The Offeror shall disclose any interest a foreign government has in the Offeror when that interest constitutes control by a foreign government as defined in this provision. If the Offeror is a subsidiary, it shall also disclose any reportable interest a foreign government has in any entity that owns or controls the subsidiary, including reportable interest concerning the Offeror's immediate parent, intermediate parents, and the ultimate parent. Use separate paper as needed, and provide the information in the following format:

Offeror's Point of Contact for Questions about Disclosure (Name and Phone Number with Country Code, City Code and Area Code, as applicable)

Name and Address of Offeror

Name and Address of Entity Controlled by a Foreign Government Description of Interest, Ownership Percentage, and Identification of Foreign Government

(End of provision)

252.236-7008 CONTRACT PRICES - BIDDING SCHEDULES. (DEC 1991)

- (a) The Government's payment for the items listed in the Bidding Schedule shall constitute full compensation to the Contractor for --
- (1) Furnishing all plant, labor, equipment, appliances, and materials; and
- (2) Performing all operations required to complete the work in conformity with the drawings and specifications.
- (b) The Contractor shall include in the prices for the items listed in the Bidding Schedule all costs for work in the specifications, whether or not specifically listed in the Bidding Schedule.

52.1000-4234

The estimated cost range of the project is from \$25,000,000.00 to \$100,000,000.00

Section 00600 - Representations & Certifications

CLAUSES INCORPORATED BY FULL TEXT

52.203-2 CERTIFICATE OF INDEPENDENT PRICE DETERMINATION (APR 1985)

- (a) The offeror certifies that --
- (1) The prices in this offer have been arrived at independently, without, for the purpose of restricting competition, any consultation, communication, or agreement with any other offeror or competitor relating to –
- (i) Those prices,
- (ii) The intention to submit an offer, or
- (iii) The methods of factors used to calculate the prices offered:
- (2) The prices in this offer have not been and will not be knowingly disclosed by the offeror, directly or indirectly, to any other offeror or competitor before bid opening (in the case of a sealed bid solicitation) or contract award (in the case of a negotiated solicitation) unless otherwise required by law; and
- (3) No attempt has been made or will be made by the offeror to induce any other concern to submit or not to submit an offer for the purpose of restricting competition.
- (b) Each signature on the offer is considered to be a certification by the signatory that the signatory --
- (1) Is the person in the offeror's organization responsible for determining the prices offered in this bid or proposal, and that the signatory has not participated and will not participate in any action contrary to subparagraphs (a)(1) through (a)(3) of this provision; or
- (2) (i) Has been authorized, in writing, to act as agent for the following principals in certifying that those principals have not participated, and will not participate in any action contrary to subparagraphs (a)(1) through (a)(3) of this provison ______ (insert full name of person(s) in the offeror's organization responsible for determining the prices offered in this bid or proposal, and the title of his or her position in the offeror's organization);
- (ii) As an authorized agent, does certify that the principals named in subdivision (b)(2)(i) above have not participated, and will not participate, in any action contrary to subparagraphs (a)(1) through (a)(3) above; and
- (iii) As an agent, has not personally participated, and will not participate, in any action contrary to subparagraphs (a)(1) through (a)(3) of this provision.
- (c) If the offeror deletes or modifies subparagraph (a)(2) of this provision, the offeror must furnish with its offer a signed statement setting forth in detail the circumstances of the disclosure.

(End of clause)

52.203-11 CERTIFICATION AND DISCLOSURE REGARDING PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS (SEP 2005)

(a) The definitions and prohibitions contained in the clause, at FAR 52.203-12, Limitation on Payments to Influence

Certain Federal Transactions, included in this solicitation, are hereby incorporated by reference in paragraph (b) of this Certification.

- (b) The offeror, by signing its offer, hereby certifies to the best of his or her knowledge and belief that on or after December 23, 1989,--
- (1) Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress on his or her behalf in connection with the awarding of this contract.
- (2) If any funds other than Federal appropriated funds (including profit or fee received under a covered Federal transaction) have been paid, or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress or an employee of a Member of Congress on his or her behalf in connection with this solicitation, the offeror shall complete and submit, with its offer, OMB standard form LLL, Disclosure of Lobbying Activities, to the Contracting Officer; and
- (3) He or she will include the language of this certification in all subcontract awards at any tier and require that all recipients of subcontract awards in excess of \$100,000 shall certify and disclose accordingly.
- (c) Submission of this certification and disclosure is a prerequisite for making or entering into this contract imposed by section 1352, title 31, United States Code. Any person who makes an expenditure prohibited under this provision, shall be subject to a civil penalty of not less than \$10,000, and not more than \$100,000, for each such failure.

(End of provision)

52.204-3 TAXPAYER IDENTIFICATION (OCT 1998)

(a) Definitions.

Common parent, as used in this provision, means that corporate entity that owns or controls an affiliated group of corporations that files its Federal income tax returns on a consolidated basis, and of which the offeror is a member.

Taxpayer Identification Number (TIN), as used in this provision, means the number required by the Internal Revenue Service (IRS) to be used by the offeror in reporting income tax and other returns. The TIN may be either a Social Security Number or an Employer Identification Number.

- (b) All offerors must submit the information required in paragraphs (d) through (f) of this provision to comply with debt collection requirements of 31 U.S.C. 7701(c) and 3325(d), reporting requirements of 26 U.S.C. 6041, 6041A, and 6050M, and implementing regulations issued by the IRS. If the resulting contract is subject to the payment reporting requirements described in Federal Acquisition Regulation (FAR) 4.904, the failure or refusal by the offeror to furnish the information may result in a 31 percent reduction of payments otherwise due under the contract.
- (c) The TIN may be used by the Government to collect and report on any delinquent amounts arising out of the offeror's relationship with the Government (31 U.S.C. 7701(c)(3)). If the resulting contract is subject to the payment reporting requirements described in FAR 4.904, the TIN provided hereunder may be matched with IRS records to verify the accuracy of the offeror's TIN.

erify the accuracy of the offeror's TIN.
d) Taxpayer Identification Number (TIN).
TIN:

TIN has been applied for.
TIN is not required because:
Offeror is a nonresident alien, foreign corporation, or foreign partnership that does not have income effectively connected with the conduct of a trade or business in the United States and does not have an office or place of business or a fiscal paying agent in the United States;
Offeror is an agency or instrumentality of a foreign government;
Offeror is an agency or instrumentality of the Federal Government.
(e) Type of organization.
Sole proprietorship;
Partnership;
Corporate entity (not tax-exempt);
Corporate entity (tax-exempt);
Government entity (Federal, State, or local);
Foreign government;
International organization per 26 CFR 1.6049-4;
Other
(f) Common parent.
Offeror is not owned or controlled by a common parent as defined in paragraph (a) of this provision.
Name and TIN of common parent:
Name
TIN
(End of provision)

52.204-6 DATA UNIVERSAL NUMBERING SYSTEM (DUNS) NUMBER (OCT 2003)

(a) The offeror shall enter, in the block with its name and address on the cover page of its offer, the annotation "DUNS" or "DUNS+4" followed by the DUNS number or "DUNS+4" that identifies the offeror's name and address exactly as stated in the offer. The DUNS number is a nine-digit number assigned by Dun and Bradstreet, Inc. The DUNS+4 is the DUNS number plus a 4-character suffix that may be assigned at the discretion of the offeror to establish additional CCR records for identifying alternative Electronic Funds Transfer (EFT) accounts (see Subpart 32.11) for the same parent concern.

- (b) If the offeror does not have a DUNS number, it should contact Dun and Bradstreet directly to obtain one.
- (1) An offeror may obtain a DUNS number--
- (i) If located within the United States, by calling Dun and Bradstreet at 1-866-705-5711 or via the Internet at http://www.dnb.com; or
- (ii) If located outside the United States, by contacting the local Dun and Bradstreet office.
- (2) The offeror should be prepared to provide the following information:
- (i) Company legal business name.
- (ii) Tradestyle, doing business, or other name by which your entity is commonly recognized.
- (iii) Company physical street address, city, state and Zip Code.
- (iv) Company mailing address, city, state and Zip Code (if separate from physical).
- (v) Company telephone number.
- (vi) Date the company was started.
- (vii) Number of employees at your location.
- (viii) Chief executive officer/key manager.
- (ix) Line of business (industry).
- (x) Company Headquarters name and address (reporting relationship within your entity).

(End of provision)

52.204-8 ANNUAL REPRESENTATIONS AND CERTIFICATIONS (JAN 2006)

- (a)(1) The North American Industry Classification System (NAICS) code for this acquisition is ----- [insert NAICS code].
- (2) The small business size standard is ----- [insert size standard].
- (3) The small business size standard for a concern which submits an offer in its own name, other than on a construction or service contract, but which proposes to furnish a product which it did not itself manufacture, is 500 employees.
- (b)(1) If the clause at 52.204-7, Central Contractor Registration, is included in this solicitation, paragraph (c) of this provision applies.
- (2) If the clause at 52.204-7 is not included in this solicitation, and the offeror is currently registered in CCR, and has completed the ORCA electronically, the offeror may choose to use paragraph (b) of this provision instead of completing the corresponding individual representations and certifications in the solicitation. The offeror shall indicate which option applies by checking one of the following boxes:

() Paragraph ((c) applies.			
() Paragraph (the solicitation.	(c) does not ap	ply and the	e offeror has con	apleted the individual representations and certifications in
Representations database inform currently posted complete, and apreferenced for the 4.1201); except title, date]. These current, accurate	and Certificat ation, the offer electronically pplicable to the his solicitation for the change e amended rep e, and complet	ions Applications Applications Applications and the estimate of the estimate as of the es	by submission of entered or upda on (including the date of this offer below [offerorn(s) and/or certificate of this offer date	and certifications electronically via the Online website at http://orca.bpn.gov. After reviewing the ORCA of the offer that the representations and certifications are different to the last 12 months, are current, accurate, a business size standard applicable to the NAICS code and are incorporated in this offer by reference (see FAR to insert changes, identifying change by clause number, ication(s) are also incorporated in this offer and are
FAR Clause		Date	Change	
Any changes prorepresentations at	and certification		* *	s solicitation only, and do not result in an update to the
52.209-5 CER OTHER RESPO				ENT, SUSPENSION, PROPOSED DEBARMENT, AND
(a)(1) The Offer	or certifies, to	the best of	its knowledge a	nd belief, that-
(i) The Offeror a	and/or any of i	ts Principal	ls-	
(A) Are () are a of contracts by a			l, suspended, pro	posed for debarment, or declared ineligible for the award
rendered against obtain, or perfor statutes relating	t them for: con ming a public to the submiss	nmission of (Federal, s sion of offe	f fraud or a crim tate, or local) co rs; or commission	eding this offer, been convicted of or had a civil judgment inal offense in connection with obtaining, attempting to ntract or subcontract; violation of Federal or state antitrust on of embezzlement, theft, forgery, bribery, falsification or on, or receiving stolen property; and
				e criminally or civilly charged by a governmental entity tragraph (a)(1)(i)(B) of this provision.
(ii) The Offeror terminated for d				riod preceding this offer, had one or more contracts
having primary	management o	r superviso	ory responsibiliti	ans officers; directors; owners; partners; and, persons es within a business entity (e.g., general manager; plant ent, and similar positions).

This Certification Concerns a Matter Within the Jurisdiction of an Agency of the United States and the Making of a False, Fictitious, or Fraudulent Certification May Render the Maker Subject to Prosecution Under Section 1001, Title 18, United States Code.

- (b) The Offeror shall provide immediate written notice to the Contracting Officer if, at any time prior to contract award, the Offeror learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- (c) A certification that any of the items in paragraph (a) of this provision exists will not necessarily result in withholding of an award under this solicitation. However, the certification will be considered in connection with a determination of the Offeror's responsibility. Failure of the Offeror to furnish a certification or provide such additional information as requested by the Contracting Officer may render the Offeror nonresponsible.
- (d) Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by paragraph (a) of this provision. The knowledge and information of an Offeror is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- (e) The certification in paragraph (a) of this provision is a material representation of fact upon which reliance was placed when making award. If it is later determined that the Offeror knowingly rendered an erroneous certification, in addition to other remedies available to the Government, the Contracting Officer may terminate the contract resulting from this solicitation for default.

(End of provision)

52.222-1 NOTICE TO THE GOVERNMENT OF LABOR DISPUTES (FEB 1997)

If the Contractor has knowledge that any actual or potential labor dispute is delaying or threatens to delay the timely performance of this contract, the Contractor shall immediately give notice, including all relevant information, to the Contracting Officer.

(End of clause)

52.222-22 PREVIOUS CONTRACTS AND COMPLIANCE REPORTS (FEB 1999)

The offeror represents that --

- (a) () It has, () has not participated in a previous contract or subcontract subject to the Equal Opportunity clause of this solicitation;
- (b) () It has, () has not, filed all required compliance reports; and
- (c) Representations indicating submission of required compliance reports, signed by proposed subcontractors, will be obtained before subcontract awards.

(End of provision)

52.223-13 CERTIFICATION OF TOXIC CHEMICAL RELEASE REPORTING (AUG 2003)

- (a) Executive Order 13148, of April 21, 2000, Greening the Government through Leadership in Environmental Management, requires submission of this certification as a prerequisite for contract award.
- (b) By signing this offer, the offeror certifies that--
- (1) As the owner or operator of facilities that will be used in the performance of this contract that are subject to the filing and reporting requirements described in section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (42 U.S.C. 11023) and section 6607 of the Pollution Prevention Act of 1990 (PPA) (42 U.S.C. 13106), the offeror will file and continue to file for such facilities for the life of the contract the Toxic Chemical Release Inventory Form (Form R) as described in sections 313(a) and (g) of EPCRA and section 6607 of PPA; or
- (2) None of its owned or operated facilities to be used in the performance of this contract is subject to the Form R filing and reporting requirements because each such facility is exempt for at least one of the following reasons: (Check each block that is applicable.)
- () (i) The facility does not manufacture, process, or otherwise use any toxic chemicals listed in 40 CFR 372.65;
- () (ii) The facility does not have 10 or more full-time employees as specified in section 313.(b)(1)(A) of EPCRA 42 U.S.C. 11023(b)(1)(A);
- () (iii) The facility does not meet the reporting thresholds of toxic chemicals established under section 313(f) of EPCRA, 42 U.S.C. 11023(f) (including the alternate thresholds at 40 CFR 372.27, provided an appropriate certification form has been filed with EPA);
- () (iv) The facility does not fall within the following Standard Industrial Classification (SIC) codes or their corresponding North American Industry Classification System sectors:
- (A) Major group code 10 (except 1011, 1081, and 1094.
- (B) Major group code 12 (except 1241).
- (C) Major group codes 20 through 39.
- (D) Industry code 4911, 4931, or 4939 (limited to facilities that combust coal and/or oil for the purpose of generating power for distribution in commerce).
- (E) Industry code 4953 (limited to facilities regulated under the Resource Conservation and Recovery Act, Subtitle C (42 U.S.C. 6921, et seq.), 5169, 5171, or 7389 (limited to facilities primarily engaged in solvent recovery services on a contract or fee basis); or
- () (v) The facility is not located within the United States or its outlying areas.

(End of clause)

52.230-1 COST ACCOUNTING STANDARDS NOTICES AND CERTIFICATION (JUN 2000)

Note: This notice does not apply to small businesses or foreign governments. This notice is in three parts, identified by Roman numerals I through III.

Offerors shall examine each part and provide the requested information in order to determine Cost Accounting Standards (CAS) requirements applicable to any resultant contract.

If the offeror is an educational institution, Part II does not apply unless the contemplated contract will be subject to full or modified CAS coverage pursuant to 48 CFR 9903.201-2(c)(5) or 9903.201-2(c)(6), respectively.

I. DISCLOSURE STATEMENT--COST ACCOUNTING PRACTICES AND CERTIFICATION

- (a) Any contract in excess of \$500,000 resulting from this solicitation will be subject to the requirements of the Cost Accounting Standards Board (48 CFR Chapter 99), except for those contracts which are exempt as specified in 48 CFR 9903.201-1.
- (b) Any offeror submitting a proposal which, if accepted, will result in a contract subject to the requirements of 48 CFR Chapter 99 must, as a condition of contracting, submit a Disclosure Statement as required by 48 CFR 9903.202. When required, the Disclosure Statement must be submitted as a part of the offeror's proposal under this solicitation unless the offeror has already submitted a Disclosure Statement disclosing the practices used in connection with the pricing of this proposal. If an applicable Disclosure Statement has already been submitted, the offeror may satisfy the requirement for submission by providing the information requested in paragraph (c) of Part I of this provision.

CAUTION: In the absence of specific regulations or agreement, a practice disclosed in a Disclosure Statement shall not, by virtue of such disclosure, be deemed to be a proper, approved, or agreed-to practice for pricing proposals or accumulating and reporting contract performance cost data.

- (c) Check the appropriate box below:
- (1) Certificate of Concurrent Submission of Disclosure Statement.

The offeror hereby certifies that, as a part of the offer, copies of the Disclosure Statement have been submitted as follows: (i) original and one copy to the cognizant Administrative Contracting Officer (ACO) or cognizant Federal agency official authorized to act in that capacity (Federal official), as applicable, and (ii) one copy to the cognizant Federal auditor.

	om the loose-leaf version of the Federal Acquisition Regulation.)
Date of Disclosure Statement:Official Where Filed:	Name and Address of Cognizant ACO or Federal
The offeror further certifies that the practice	es used in estimating costs in pricing this proposal are consistent w

(Disclosure must be on Form No. CASB DS-1 or CASB DS-2, as applicable. Forms may be obtained from the

The offeror further certifies that the practices used in estimating costs in pricing this proposal are consistent with the cost accounting practices disclosed in the Disclosure Statement.

(2) Certificate of Previously Submitted Disclosure Statement.

The offeror hereby certifies that the required Disclosure Statement was filed as follows:

Date of Disclosure Statement:	Name and Address of Cognizant ACO or Federal
Official Where Filed:	

The offeror further certifies that the practices used in estimating costs in pricing this proposal are consistent with the cost accounting practices disclosed in the applicable Disclosure Statement.

(3) Certificate of Monetary Exemption.

The offeror hereby certifies that the offeror, together with all divisions, subsidiaries, and affiliates under common control, did not receive net awards of negotiated prime contracts and subcontracts subject to CAS totaling more than \$50 million (of which at least one award exceeded \$1 million) in the cost accounting period immediately preceding the period in which this proposal was submitted. The offeror further certifies that if such status changes before an award resulting from this proposal, the offeror will advise the Contracting Officer immediately.

(4) Certificate of Interim Exemption.

The offeror hereby certifies that (i) the offeror first exceeded the monetary exemption for disclosure, as defined in (3) of this subsection, in the cost accounting period immediately preceding the period in which this offer was submitted and (ii) in accordance with 48 CFR 9903.202-1, the offeror is not yet required to submit a Disclosure Statement. The offeror further certifies that if an award resulting from this proposal has not been made within 90 days after the end of that period, the offeror will immediately submit a revised certificate to the Contracting Officer, in the form specified under subparagraph (c)(1) or (c)(2) of Part I of this provision, as appropriate, to verify submission of a completed Disclosure Statement.

CAUTION: Offerors currently required to disclose because they were awarded a CAS-covered prime contract or subcontract of \$50 million or more in the current cost accounting period may not claim this exemption (4). Further, the exemption applies only in connection with proposals submitted before expiration of the 90-day period following the cost accounting period in which the monetary exemption was exceeded.

II. COST ACCOUNTING STANDARDS--ELIGIBILITY FOR MODIFIED CONTRACT COVERAGE

If the offeror is eligible to use the modified provisions of 48 CFR 9903.201-2(b) and elects to do so, the offeror shall indicate by checking the box below. Checking the box below shall mean that the resultant contract is subject to the Disclosure and Consistency of Cost Accounting Practices clause in lieu of the Cost Accounting Standards clause.

() The offeror hereby claims an exemption from the Cost Accounting Standards clause under the provisions of 48 CFR 9903.201-2(b) and certifies that the offeror is eligible for use of the Disclosure and Consistency of Cost Accounting Practices clause because during the cost accounting period immediately preceding the period in which this proposal was submitted, the offeror received less than \$50 million in awards of CAS-covered prime contracts and subcontracts. The offeror further certifies that if such status changes before an award resulting from this proposal, the offeror will advise the Contracting Officer immediately.

CAUTION: An offeror may not claim the above eligibility for modified contract coverage if this proposal is expected to result in the award of a CAS-covered contract of \$50 million or more or if, during its current cost accounting period, the offeror has been awarded a single CAS-covered prime contract or subcontract of \$25 million or more.

III. ADDITIONAL COST ACCOUNTING STANDARDS APPLICABLE TO EXISTING CONTRACTS

The offeror shall indicate below whether award of the contemplated contract would, in accordance with subparagraph (a)(3) of the Cost Accounting Standards clause, require a change in established cost accounting practices affecting existing contracts and subcontracts.

()	Y	ES	()	NO)
(I	Ξn	ıd	of	cl	au	ise)	

252.209-7001 DISCLOSURE OF OWNERSHIP OR CONTROL BY THE GOVERNMENT OF A TERRORIST COUNTRY (SEP 2004)

(a) "Definitions."

As used in this provision --

- (a) "Government of a terrorist country" includes the state and the government of a terrorist country, as well as any political subdivision, agency, or instrumentality thereof.
- (2) "Terrorist country" means a country determined by the Secretary of State, under section 6(j)(1)(A) of the Export Administration Act of 1979 (50 U.S.C. App. 2405(j)(i)(A)), to be a country the government of which has repeatedly provided support for such acts of international terrorism. As of the date of this provision, terrorist countries subject to this provision include: Cuba, Iran, Libya, North Korea, Sudan, and Syria.
- (3) "Significant interest" means --
- (i) Ownership of or beneficial interest in 5 percent or more of the firm's or subsidiary's securities. Beneficial interest includes holding 5 percent or more of any class of the firm's securities in "nominee shares," "street names," or some other method of holding securities that does not disclose the beneficial owner;
- (ii) Holding a management position in the firm, such as a director or officer;
- (iii) Ability to control or influence the election, appointment, or tenure of directors or officers in the firm;
- (iv) Ownership of 10 percent or more of the assets of a firm such as equipment, buildings, real estate, or other tangible assets of the firm; or
- (v) Holding 50 percent or more of the indebtness of a firm.
- (b) "Prohibition on award."

In accordance with 10 U.S.C. 2327, no contract may be awarded to a firm or a subsidiary of a firm if the government of a terrorist country has a significant interest in the firm or subsidiary or, in the case of a subsidiary, the firm that owns the subsidiary, unless a waiver is granted by the Secretary of Defense.

(c) "Disclosure."

If the government of a terrorist country has a significant interest in the Offeror or a subsidiary of the Offeror, the Offeror shall disclosure such interest in an attachment to its offer. If the Offeror is a subsidiary, it shall also disclose any significant interest the government of a terrorist country has in any firm that owns or controls the subsidiary. The disclosure shall include --

- (1) Identification of each government holding a significant interest; and
- (2) A description of the significant interest held by each government.

(End of provision)

252.225-7031 SECONDARY ARAB BOYCOTT OF ISRAEL (JUN 2005)

(a) Definitions. As used in this provision--

- (1) Foreign person means any person (including any individual, partnership, corporation, or other form of association) other than a United States person.
- (2) United States means the 50 States, the District of Columbia, outlying areas, and the outer Continental Shelf as defined in 43 U.S.C. 1331.
- (3) United States person is defined in 50 U.S.C. App. 2415(2) and means--
- (i) Any United States resident or national (other than an individual resident outside the United States who is employed by other than a United States person);
- (ii) Any domestic concern (including any permanent domestic establishment of any foreign concern); and
- (iii) Any foreign subsidiary or affiliate (including any permanent foreign establishment) of any domestic concern that is controlled in fact by such domestic concern.
- (b) Certification. If the offeror is a foreign person, the offeror certifies, by submission of an offer, that it-
- (1) Does not comply with the Secondary Arab Boycott of Israel; and
- (2) Is not taking or knowingly agreeing to take any action, with respect to the Secondary Boycott of Israel by Arab countries, which 50 U.S.C. App. 2407(a) prohibits a United States person from taking.

(End of provision)

252.247-7022 REPRESENTATION OF EXTENT OF TRANSPORTATION BY SEA (AUG 1992)

- (a) The Offeror shall indicate by checking the appropriate blank in paragraph (b) of this provision whether transportation of supplies by sea is anticipated under the resultant contract. The term supplies is defined in the Transportation of Supplies by Sea clause of this solicitation.
- (b) Representation. The Offeror represents that it:
- ____(1) Does anticipate that supplies will be transported by sea in the performance of any contract or subcontract resulting from this solicitation.
- ____ (2) Does not anticipate that supplies will be transported by sea in the performance of any contract or subcontract resulting from this solicitation.
- (c) Any contract resulting from this solicitation will include the Transportation of Supplies by Sea clause. If the Offeror represents that it will not use ocean transportation, the resulting contract will also include the Defense FAR Supplement clause at 252.247-7024, Notification of Transportation of Supplies by Sea.

(End of provision)

Section 00700 - Contract Clauses

CLAUSES INCORPORATED BY FULL TEXT

52.202-1 DEFINITIONS (JUL 2004)

- (a) When a solicitation provision or contract clause uses a word or term that is defined in the Federal Acquisition Regulation (FAR), the word or term has the same meaning as the definition in FAR 2.101 in effect at the time the solicitation was issued, unless--
- (1) The solicitation, or amended solicitation, provides a different definition;
- (2) The contracting parties agree to a different definition;
- (3) The part, subpart, or section of the FAR where the provision or clause is prescribed provides a different meaning; or
- (4) The word or term is defined in FAR Part 31, for use in the cost principles and procedures.
- (b) The FAR Index is a guide to words and terms the FAR defines and shows where each definition is located. The FAR Index is available via the Internet at http://www.acqnet.gov at the end of the FAR, after the FAR Appendix.

(End of clause)

52.203-3 GRATUITIES (APR 1984)

- (a) The right of the Contractor to proceed may be terminated by written notice if, after notice and hearing, the agency head or a designee determines that the Contractor, its agent, or another representative--
- (1) Offered or gave a gratuity (e.g., an entertainment or gift) to an officer, official, or employee of the Government; and
- (2) Intended, by the gratuity, to obtain a contract or favorable treatment under a contract.
- (b) The facts supporting this determination may be reviewed by any court having lawful jurisdiction.
- (c) If this contract is terminated under paragraph (a) of this clause, the Government is entitled-
- (1) To pursue the same remedies as in a breach of the contract; and
- (2) In addition to any other damages provided by law, to exemplary damages of not less than 3 nor more than 10 times the cost incurred by the Contractor in giving gratuities to the person concerned, as determined by the agency head or a designee. (This subparagraph (c)(2) is applicable only if this contract uses money appropriated to the Department of Defense.)
- (d) The rights and remedies of the Government provided in this clause shall not be exclusive and are in addition to any other rights and remedies provided by law or under this contract.

(End of clause)

52.203-5 COVENANT AGAINST CONTINGENT FEES (APR 1984)

- (a) The Contractor warrants that no person or agency has been employed or retained to solicit or obtain this contract upon an agreement or understanding for a contingent fee, except a bona fide employee or agency. For breach or violation of this warranty, the Government shall have the right to annul this contract without liability or, in its discretion, to deduct from the contract price or consideration, or otherwise recover, the full amount of the contingent fee.
- (b) "Bona fide agency," as used in this clause, means an established commercial or selling agency, maintained by a contractor for the purpose of securing business, that neither exerts nor proposes to exert improper influence to solicit or obtain Government contracts nor holds itself out as being able to obtain any Government contract or contracts through improper influence.

"Bona fide employee," as used in this clause, means a person, employed by a contractor and subject to the contractor's supervision and control as to time, place, and manner of performance, who neither exerts nor proposes to exert improper influence to solicit or obtain Government contracts nor holds out as being able to obtain any Government contract or contracts through improper influence.

"Contingent fee," as used in this clause, means any commission, percentage, brokerage, or other fee that is contingent upon the success that a person or concern has in securing a Government contract.

"Improper influence," as used in this clause, means any influence that induces or tends to induce a Government employee or officer to give consideration or to act regarding a Government contract on any basis other than the merits of the matter.

(End of clause)

52.203-7 ANTI-KICKBACK PROCEDURES. (JUL 1995)

(a) Definitions.

"Kickback," as used in this clause, means any money, fee, commission, credit, gift, gratuity, thing of value, or compensation of any kind which is provided, directly or indirectly, to any prime Contractor, prime Contractor employee, subcontractor, or subcontractor employee for the purpose of improperly obtaining or rewarding favorable treatment in connection with a prime contract or in connection with a subcontract relating to a prime contract.

"Person," as used in this clause, means a corporation, partnership, business association of any kind, trust, joint-stock company, or individual.

"Prime contract," as used in this clause, means a contract or contractual action entered into by the United States for the purpose of obtaining supplies, materials, equipment, or services of any kind.

"Prime Contractor," as used in this clause, means a person who has entered into a prime contract with the United States.

"Prime Contractor employee," as used in this clause, means any officer, partner, employee, or agent of a prime Contractor.

"Subcontract," as used in this clause, means a contract or contractual action entered into by a prime Contractor or subcontractor for the purpose of obtaining supplies, materials, equipment, or services of any kind under a prime contract.

"Subcontractor," as used in this clause, (1) means any person, other than the prime Contractor, who offers to furnish or furnishes any supplies, materials, equipment, or services of any kind under a prime contract or a subcontract entered into in connection with such prime contract, and (2) includes any person who offers to furnish or furnishes general supplies to the prime Contractor or a higher tier subcontractor.

"Subcontractor employee," as used in this clause, means any officer, partner, employee, or agent of a subcontractor.

- (b) The Anti-Kickback Act of 1986 (41 U.S.C. 51-58) (the Act), prohibits any person from -
- (1) Providing or attempting to provide or offering to provide any kickback;
- (2) Soliciting, accepting, or attempting to accept any kickback; or
- (3) Including, directly or indirectly, the amount of any kickback in the contract price charged by a prime Contractor to the United States or in the contract price charged by a subcontractor to a prime Contractor or higher tier subcontractor.
- (c)(1) The Contractor shall have in place and follow reasonable procedures designed to prevent and detect possible violations described in paragraph (b) of this clause in its own operations and direct business relationships.
- (2) When the Contractor has reasonable grounds to believe that a violation described in paragraph (b) of this clause may have occurred, the Contractor shall promptly report in writing the possible violation. Such reports shall be made to the inspector general of the contracting agency, the head of the contracting agency if the agency does not have an inspector general, or the Department of Justice.
- (3) The Contractor shall cooperate fully with any Federal agency investigating a possible violation described in paragraph (b) of this clause.
- (4) The Contracting Officer may (i) offset the amount of the kickback against any monies owed by the United States under the prime contract and/or (ii) direct that the Prime Contractor withhold, from sums owed a subcontractor under the prime contract, the amount of any kickback. The Contracting Officer may order the monies withheld under subdivision (c)(4)(ii) of this clause be paid over to the Government unless the Government has already offset those monies under subdivision (c)(4)(i) of this clause. In either case, the Prime Contractor shall notify the Contracting Officer when the monies are withheld.
- (5) The Contractor agrees to incorporate the substance of this clause, including this subparagraph (c)(5) but excepting subparagraph (c)(1), in all subcontracts under this contract which exceed \$100,000.

52.203-8 CANCELLATION, RESCISSION, AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY (JAN 1997)

- (a) If the Government receives information that a contractor or a person has engaged in conduct constituting a violation of subsection (a), (b), (c), or (d) of Section 27 of the Office of Federal Procurement Policy Act (41 U.S.C. 423) (the Act), as amended by section 4304 of the 1996 National Defense Authorization Act for Fiscal Year 1996 (Pub. L. 104-106), the Government may--
- (1) Cancel the solicitation, if the contract has not yet been awarded or issued; or

- (2) Rescind the contract with respect to which--
- (i) The Contractor or someone acting for the Contractor has been convicted for an offense where the conduct constitutes a violation of subsection 27(a) or (b) of the Act for the purpose of either--
- (A) Exchanging the information covered by such subsections for anything of value; or
- (B) Obtaining or giving anyone a competitive advantage in the award of a Federal agency procurement contract; or
- (ii) The head of the contracting activity has determined, based upon a preponderance of the evidence, that the Contractor or someone acting for the Contractor has engaged in conduct constituting an offense punishable under subsections 27(e)(1) of the Act.
- (b) If the Government rescinds the contract under paragraph (a) of this clause, the Government is entitled to recover, in addition to any penalty prescribed by law, the amount expended under the contract.
- (c) The rights and remedies of the Government specified herein are not exclusive, and are in addition to any other rights and remedies provided by law, regulation, or under this contract.

52.203-10 PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY (JAN 1997)

- (a) The Government, at its election, may reduce the price of a fixed-price type contract and the total cost and fee under a cost-type contract by the amount of profit or fee determined as set forth in paragraph (b) of this clause if the head of the contracting activity or designee determines that there was a violation of subsection 27 (a), (b), or (c) of the Office of Federal Procurement Policy Act, as amended (41 U.S.C. 423), as implemented in section 3.104 of the Federal Acquisition Regulation.
- (b) The price or fee reduction referred to in paragraph (a) of this clause shall be--
- (1) For cost-plus-fixed-fee contracts, the amount of the fee specified in the contract at the time of award;
- (2) For cost-plus-incentive-fee contracts, the target fee specified in the contract at the time of award, notwithstanding any minimum fee or "fee floor" specified in the contract;
- (3) For cost-plus-award-fee contracts--
- (i) The base fee established in the contract at the time of contract award;
- (ii) If no base fee is specified in the contract, 30 percent of the amount of each award fee otherwise payable to the Contractor for each award fee evaluation period or at each award fee determination point.
- (4) For fixed-price-incentive contracts, the Government may--
- (i) Reduce the contract target price and contract target profit both by an amount equal to the initial target profit specified in the contract at the time of contract award; or
- (ii) If an immediate adjustment to the contract target price and contract target profit would have a significant adverse impact on the incentive price revision relationship under the contract, or adversely affect the contract financing provisions, the Contracting Officer may defer such adjustment until establishment of the total final price of the contract. The total final price established in accordance with the incentive price revision provisions of the

contract shall be reduced by an amount equal to the initial target profit specified in the contract at the time of contract award and such reduced price shall be the total final contract price.

- (5) For firm-fixed-price contracts, by 10 percent of the initial contract price or a profit amount determined by the Contracting Officer from records or documents in existence prior to the date of the contract award.
- (c) The Government may, at its election, reduce a prime contractor's price or fee in accordance with the procedures of paragraph (b) of this clause for violations of the Act by its subcontractors by an amount not to exceed the amount of profit or fee reflected in the subcontract at the time the subcontract was first definitively priced.
- (d) In addition to the remedies in paragraphs (a) and (c) of this clause, the Government may terminate this contract for default. The rights and remedies of the Government specified herein are not exclusive, and are in addition to any other rights and remedies provided by law or under this contract.

(End of clause)

52.203-12 LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS (SEP 2005)

(a) Definitions.

"Agency," as used in this clause, means executive agency as defined in 2.101.

"Covered Federal action," as used in this clause, means any of the following Federal actions:

- (1) The awarding of any Federal contract.
- (2) The making of any Federal grant.
- (3) The making of any Federal loan.
- (4) The entering into of any cooperative agreement.
- (5) The extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

"Indian tribe" and "tribal organization," as used in this clause, have the meaning provided in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450B) and include Alaskan Natives.

"Influencing or attempting to influence," as used in this clause, means making, with the intent to influence, any communication to or appearance before an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any covered Federal action.

"Local government," as used in this clause, means a unit of government in a State and, if chartered, established, or otherwise recognized by a State for the performance of a governmental duty, including a local public authority, a special district, an intrastate district, a council of governments, a sponsor group representative organization, and any other instrumentality of a local government.

"Officer or employee of an agency," as used in this clause, includes the following individuals who are employed by an agency:

(1) An individual who is appointed to a position in the Government under Title 5, United States Code, including a position under a temporary appointment.

- (2) A member of the uniformed services, as defined in subsection 101(3), Title 37, United States Code.
- (3) A special Government employee, as defined in section 202, Title 18, United States Code.
- (4) An individual who is a member of a Federal advisory committee, as defined by the Federal Advisory Committee Act, Title 5, United States Code, appendix 2.

"Person," as used in this clause, means an individual, corporation, company, association, authority, firm, partnership, society, State, and local government, regardless of whether such entity is operated for profit, or not for profit. This term excludes an Indian tribe, tribal organization, or any other Indian organization with respect to expenditures specifically permitted by other Federal law.

"Reasonable compensation," as used in this clause, means, with respect to a regularly employed officer or employee of any person, compensation that is consistent with the normal compensation for such officer or employee for work that is not furnished to, not funded by, or not furnished in cooperation with the Federal Government.

"Reasonable payment," as used in this clause, means, with respect to professional and other technical services, a payment in an amount that is consistent with the amount normally paid for such services in the private sector.

"Recipient," as used in this clause, includes the Contractor and all subcontractors. This term excludes an Indian tribe, tribal organization, or any other Indian organization with respect to expenditures specifically permitted by other Federal law.

"Regularly employed," as used in this clause, means, with respect to an officer or employee of a person requesting or receiving a Federal contract, an officer or employee who is employed by such person for at least 130 working days within 1 year immediately preceding the date of the submission that initiates agency consideration of such person for receipt of such contract. An officer or employee who is employed by such person for less than 130 working days within 1 year immediately preceding the date of the submission that initiates agency consideration of such person shall be considered to be regularly employed as soon as he or she is employed by such person for 130 working days.

State, as used in this clause, means a State of the United States, the District of Columbia, or an outlying area of the United States, an agency or instrumentality of a State, and multi-State, regional, or interstate entity having governmental duties and powers.

- (b) Prohibitions.
- (1) Section 1352 of Title 31, United States Code, among other things, prohibits a recipient of a Federal contract, grant, loan, or cooperative agreement from using appropriated funds to pay any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any of the following covered Federal actions: the awarding of any Federal contract; the making of any Federal grant; the making of any Federal loan; the entering into of any cooperative agreement; or the modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) The Act also requires Contractors to furnish a disclosure if any funds other than Federal appropriated funds (including profit or fee received under a covered Federal transaction) have been paid, or will be paid, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a Federal contract, grant, loan, or cooperative agreement.
- (3) The prohibitions of the Act do not apply under the following conditions:
- (i) Agency and legislative liaison by own employees.

- (A) The prohibition on the use of appropriated funds, in subparagraph (b)(1) of this clause, does not apply in the case of a payment of reasonable compensation made to an officer or employee of a person requesting or receiving a covered Federal action if the payment is for agency and legislative liaison activities not directly related to a covered Federal action.
- (B) For purposes of subdivision (b)(3)(i)(A) of this clause, providing any information specifically requested by an agency or Congress is permitted at any time.
- (C) The following agency and legislative liaison activities are permitted at any time where they are not related to a specific solicitation for any covered Federal action:
- (1) Discussing with an agency the qualities and characteristics (including individual demonstrations) of the person's products or services, conditions or terms of sale, and service capabilities.
- (2) Technical discussions and other activities regarding the application or adaptation of the person's products or services for an agency's use.
- (D) The following agency and legislative liaison activities are permitted where they are prior to formal solicitation of any covered Federal action--
- (1) Providing any information not specifically requested but necessary for an agency to make an informed decision about initiation of a covered Federal action;
- (2) Technical discussions regarding the preparation of an unsolicited proposal prior to its official submission; and
- (3) Capability presentations by persons seeking awards from an agency pursuant to the provisions of the Small Business Act, as amended by Pub. L. 95-507, and subsequent amendments.
- (E) Only those agency and legislative liaison activities expressly authorized by paragraph (b)(3)(i) of this clause are permitted under this clause.
- (ii) Professional and technical services.
- (A) The prohibition on the use of appropriated funds, in subparagraph (b)(1) of this clause, does not apply in the case of--
- (1) A payment of reasonable compensation made to an officer or employee of a person requesting or receiving a covered Federal action or an extension, continuation, renewal, amendment, or modification of a covered Federal action, if payment is for professional or technical services rendered directly in the preparation, submission, or negotiation of any bid, proposal, or application for that Federal action or for meeting requirements imposed by or pursuant to law as a condition for receiving that Federal action.
- (2) Any reasonable payment to a person, other than an officer or employee of a person requesting or receiving a covered Federal action or an extension, continuation, renewal, amendment, or modification of a covered Federal action if the payment is for professional or technical services rendered directly in the preparation, submission, or negotiation of any bid, proposal, or application for that Federal action or for meeting requirements imposed by or pursuant to law as a condition for receiving that Federal action. Persons other than officers or employees of a person requesting or receiving a covered Federal action include consultants and trade associations.
- (B) For purposes of subdivision (b)(3)(ii)(A) of this clause, "professional and technical services" shall be limited to advice and analysis directly applying any professional or technical discipline. For example, drafting of a legal document accompanying a bid or proposal by a lawyer is allowable. Similarly, technical advice provided by an engineer on the performance or operational capability of a piece of equipment rendered directly in the negotiation of

a contract is allowable. However, communications with the intent to influence made by a professional (such as a licensed lawyer) or a technical person (such as a licensed accountant) are not allowable under this section unless they provide advice and analysis directly applying their professional or technical expertise and unless the advice or analysis is rendered directly and solely in the preparation, submission or negotiation of a covered Federal action. Thus, for example, communications with the intent to influence made by a lawyer that do not provide legal advice or analysis directly and solely related to the legal aspects of his or her client's proposal, but generally advocate one proposal over another are not allowable under this section because the lawyer is not providing professional legal services. Similarly, communications with the intent to influence made by an engineer providing an engineering analysis prior to the preparation or submission of a bid or proposal are not allowable under this section since the engineer is providing technical services but not directly in the preparation, submission or negotiation of a covered Federal action.

- (C) Requirements imposed by or pursuant to law as a condition for receiving a covered Federal award include those required by law or regulation and any other requirements in the actual award documents.
- (D) Only those professional and technical services expressly authorized by paragraph (b)(3)(ii) of this clause are permitted under this clause.
- (4) The reporting requirements of FAR 3.803(a) shall not apply with respect to payments of reasonable compensation made to regularly employed officers or employees of a person.
- (c) Disclosure.
- (1) The Contractor who requests or receives from an agency a Federal contract shall file with that agency a disclosure form, OMB standard form LLL, Disclosure of Lobbying Activities, if such person has made or has agreed to make any payment using nonappropriated funds (to include profits from any covered Federal action), which would be prohibited under subparagraph (b)(1) of this clause, if paid for with appropriated funds.
- (2) The Contractor shall file a disclosure form at the end of each calendar quarter in which there occurs any event that materially affects the accuracy of the information contained in any disclosure form previously filed by such person under subparagraph (c)(1) of this clause. An event that materially affects the accuracy of the information reported includes--
- (i) A cumulative increase of \$25,000 or more in the amount paid or expected to be paid for influencing or attempting to influence a covered Federal action; or
- (ii) A change in the person(s) or individual(s) influencing or attempting to influence a covered Federal action; or
- (iii) A change in the officer(s), employee(s), or Member(s) contacted to influence or attempt to influence a covered Federal action.
- (3) The Contractor shall require the submittal of a certification, and if required, a disclosure form by any person who requests or receives any subcontract exceeding \$100,000 under the Federal contract.
- (4) All subcontractor disclosure forms (but not certifications) shall be forwarded from tier to tier until received by the prime Contractor. The prime Contractor shall submit all disclosures to the Contracting Officer at the end of the calendar quarter in which the disclosure form is submitted by the subcontractor. Each subcontractor certification shall be retained in the subcontract file of the awarding Contractor.
- (d) Agreement. The Contractor agrees not to make any payment prohibited by this clause.
- (e) Penalties.

- (1) Any person who makes an expenditure prohibited under paragraph (a) of this clause or who fails to file or amend the disclosure form to be filed or amended by paragraph (b) of this clause shall be subject to civil penalties as provided for by 31 U.S.C. 1352. An imposition of a civil penalty does not prevent the Government from seeking any other remedy that may be applicable.
- (2) Contractors may rely without liability on the representation made by their subcontractors in the certification and disclosure form.
- (f) Cost allowability. Nothing in this clause makes allowable or reasonable any costs which would otherwise be unallowable or unreasonable. Conversely, costs made specifically unallowable by the requirements in this clause will not be made allowable under any other provision.

52.204-4 PRINTED OR COPIED DOUBLE-SIDED ON RECYCLED PAPER (AUG 2000)

(a) Definitions. As used in this clause--

"Postconsumer material" means a material or finished product that has served its intended use and has been discarded for disposal or recovery, having completed its life as a consumer item. Postconsumer material is a part of the broader category of "recovered material." For paper and paper products, postconsumer material means "postconsumer fiber" defined by the U.S. Environmental Protection Agency (EPA) as--

- (1) Paper, paperboard, and fibrous materials from retail stores, office buildings, homes, and so forth, after they have passed through their end-usage as a consumer item, including: used corrugated boxes; old newspapers; old magazines; mixed waste paper; tabulating cards; and used cordage; or
- (2) All paper, paperboard, and fibrous materials that enter and are collected from municipal solid waste; but not
- (3) Fiber derived from printers' over-runs, converters' scrap, and over-issue publications.
- "Printed or copied double-sided" means printing or reproducing a document so that information is on both sides of a sheet of paper.
- "Recovered material," for paper and paper products, is defined by EPA in its Comprehensive Procurement Guideline as "recovered fiber" and means the following materials:
- (1) Postconsumer fiber; and
- (2) Manufacturing wastes such as--
- (i) Dry paper and paperboard waste generated after completion of the papermaking process (that is, those manufacturing operations up to and including the cutting and trimming of the paper machine reel into smaller rolls or rough sheets) including: envelope cuttings, bindery trimmings, and other paper and paperboard waste resulting from printing, cutting, forming, and other converting operations; bag, box, and carton manufacturing wastes; and butt rolls, mill wrappers, and rejected unused stock; and
- (ii) Repulped finished paper and paperboard from obsolete inventories of paper and paperboard manufacturers, merchants, wholesalers, dealers, printers, converters, or others.
- (b) In accordance with Section 101 of Executive Order 13101 of September 14, 1998, Greening the Government through Waste Prevention, Recycling, and Federal Acquisition, the Contractor is encouraged to submit paper

documents, such as offers, letters, or reports, that are printed or copied double-sided on recycled paper that meet minimum content standards specified in Section 505 of Executive Order 13101, when not using electronic commerce methods to submit information or data to the Government.

(c) If the Contractor cannot purchase high-speed copier paper, offset paper, forms bond, computer printout paper, carbonless paper, file folders, white wove envelopes, writing and office paper, book paper, cotton fiber paper, and cover stock meeting the 30 percent postconsumer material standard for use in submitting paper documents to the Government, it should use paper containing no less than 20 percent postconsumer material. This lesser standard should be used only when paper meeting the 30 percent postconsumer material standard is not obtainable at a reasonable price or does not meet reasonable performance standards.

(End of clause)

52.209-6 PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT (JAN 2005)

- (a) The Government suspends or debars Contractors to protect the Government's interests. The Contractor shall not enter into any subcontract in excess of the \$25,000 with a Contractor that is debarred, suspended, or proposed for debarment unless there is a compelling reason to do so.
- (b) The Contractor shall require each proposed first-tier subcontractor, whose subcontract will exceed \$25,000, to disclose to the Contractor, in writing, whether as of the time of award of the subcontract, the subcontractor, or its principles, is or is not debarred, suspended, or proposed for debarrent by the Federal Government.
- (c) A corporate officer or a designee of the Contractor shall notify the Contracting Officer, in writing, before entering into a subcontract with a party that is debarred, suspended, or proposed for debarment (see FAR 9.404 for information on the in the Excluded Parties List System). The notice must include the following:
- (1) The name of the subcontractor.
- (2) The Contractor's knowledge of the reasons for the subcontractor being in the Excluded Parties List System.
- (3) The compelling reason(s) for doing business with the subcontractor notwithstanding its inclusion in the Excluded Parties List System.
- (4) The systems and procedures the Contractor has established to ensure that it is fully protecting the Government's interests when dealing with such subcontractor in view of the specific basis for the party's debarment, suspension, or proposed debarment.

(End of clause)

52.215-2 AUDIT AND RECORDS--NEGOTIATION (JUN 1999)

- (a) As used in this clause, "records" includes books, documents, accounting procedures and practices, and other data, regardless of type and regardless of whether such items are in written form, in the form of computer data, or in any other form.
- (b) Examination of costs. If this is a cost-reimbursement, incentive, time-and-materials, labor-hour, or price redeterminable contract, or any combination of these, the Contractor shall maintain and the Contracting Officer, or an authorized representative of the Contracting Officer, shall have the right to examine and audit all records and

other evidence sufficient to reflect properly all costs claimed to have been incurred or anticipated to be incurred directly or indirectly in performance of this contract. This right of examination shall include inspection at all reasonable times of the Contractor's plants, or parts of them, engaged in performing the contract.

- (c) Cost or pricing data. If the Contractor has been required to submit cost or pricing data in connection with any pricing action relating to this contract, the Contracting Officer, or an authorized representative of the Contracting Officer, in order to evaluate the accuracy, completeness, and currency of the cost or pricing data, shall have the right to examine and audit all of the Contractor's records, including computations and projections, related to--
- (1) The proposal for the contract, subcontract, or modification;
- (2) The discussions conducted on the proposal(s), including those related to negotiating;
- (3) Pricing of the contract, subcontract, or modification; or
- (4) Performance of the contract, subcontract or modification.
- (d) Comptroller General--(1) The Comptroller General of the United States, or an authorized representative, shall have access to and the right to examine any of the Contractor's directly pertinent records involving transactions related to this contract or a subcontract hereunder.
- (2) This paragraph may not be construed to require the Contractor or subcontractor to create or maintain any record that the Contractor or subcontractor does not maintain in the ordinary course of business or pursuant to a provision of law.
- (e) Reports. If the Contractor is required to furnish cost, funding, or performance reports, the Contracting Officer or an authorized representative of the Contracting Officer shall have the right to examine and audit the supporting records and materials, for the purpose of evaluating (1) the effectiveness of the Contractor's policies and procedures to produce data compatible with the objectives of these reports and (2) the data reported.
- (f) Availability. The Contractor shall make available at its office at all reasonable times the records, materials, and other evidence described in paragraphs (a), (b), (c), (d), and (e) of this clause, for examination, audit, or reproduction, until 3 years after final payment under this contract or for any shorter period specified in Subpart 4.7, Contractor Records Retention, of the Federal Acquisition Regulation (FAR), or for any longer period required by statute or by other clauses of this contract. In addition--
- (1) If this contract is completely or partially terminated, the Contractor shall make available the records relating to the work terminated until 3 years after any resulting final termination settlement; and
- (2) The Contractor shall make available records relating to appeals under the Disputes clause or to litigation or the settlement of claims arising under or relating to this contract until such appeals, litigation, or claims are finally resolved.
- (g) The Contractor shall insert a clause containing all the terms of this clause, including this paragraph (g), in all subcontracts under this contract that exceed the simplified acquisition threshold, and--
- (1) That are cost-reimbursement, incentive, time-and-materials, labor-hour, or price-redeterminable type or any combination of these;
- (2) For which cost or pricing data are required; or
- (3) That require the subcontractor to furnish reports as discussed in paragraph (e) of this clause.

The clause may be altered only as necessary to identify properly the contracting parties and the Contracting Officer

under the Government prime contract.

(End of clause)

52.215-11 PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA--MODIFICATIONS (OCT 1997)

- (a) This clause shall become operative only for any modification to this contract involving a pricing adjustment expected to exceed the threshold for submission of cost or pricing data at FAR 15.403-4, except that this clause does not apply to any modification if an exception under FAR 15.403-1 applies.
- (b) If any price, including profit or fee, negotiated in connection with any modification under this clause, or any cost reimbursable under this contract, was increased by any significant amount because (1) the Contractor or a subcontractor furnished cost or pricing data that were not complete, accurate, and current as certified in its Certificate of Current Cost or Pricing Data, (2) a subcontractor or prospective subcontractor furnished the Contractor cost or pricing data that were not complete, accurate, and current as certified in the Contractor's Certificate of Current Cost or Pricing Data, or (3) any of these parties furnished data of any description that were not accurate, the price or cost shall be reduced accordingly and the contract shall be modified to reflect the reduction. This right to a price reduction is limited to that resulting from defects in data relating to modifications for which this clause becomes operative under paragraph (a) of this clause.
- (c) Any reduction in the contract price under paragraph (b) of this clause due to defective data from a prospective subcontractor that was not subsequently awarded the subcontract shall be limited to the amount, plus applicable overhead and profit markup, by which--
- (1) The actual subcontract; or
- (2) The actual cost to the Contractor, if there was no subcontract, was less than the prospective subcontract cost estimate submitted by the Contractor; provided, that the actual subcontract price was not itself affected by defective cost or pricing data.
- (d)(1) If the Contracting Officer determines under paragraph (b) of this clause that a price or cost reduction should be made, the Contractor agrees not to raise the following matters as a defense:
- (i) The Contractor or subcontractor was a sole source supplier or otherwise was in a superior bargaining position and thus the price of the contract would not have been modified even if accurate, complete, and current cost or pricing data had been submitted.
- (ii) The Contracting Officer should have known that the cost or pricing data in issue were defective even though the Contractor or subcontractor took no affirmative action to bring the character of the data to the attention of the Contracting Officer.
- (iii) The contract was based on an agreement about the total cost of the contract and there was no agreement about the cost of each item procured under the contract.
- (iv) The Contractor or subcontractor did not submit a Certificate of Current Cost or Pricing Data.
- (2)(i) Except as prohibited by subdivision (d)(2)(ii) of this clause, an offset in an amount determined appropriate by the Contracting Officer based upon the facts shall be allowed against the amount of a contract price reduction if-
- (A) The Contractor certifies to the Contracting Officer that, to the best of the Contractor's knowledge and belief, the Contractor is entitled to the offset in the amount requested; and

- (B) The Contractor proves that the cost or pricing data were available before the "as of" date specified on its Certificate of Current Cost or Pricing Data, and that the data were not submitted before such date.
- (ii) An offset shall not be allowed if--
- (A) The understated data were known by the Contractor to be understated before the "as of" date specified on its Certificate of Current Cost or Pricing Data; or
- (B) The Government proves that the facts demonstrate that the contract price would not have increased in the amount to be offset even if the available data had been submitted before the "as of" date specified on its Certificate of Current Cost or Pricing Data.
- (e) If any reduction in the contract price under this clause reduces the price of items for which payment was made prior to the date of the modification reflecting the price reduction, the Contractor shall be liable to and shall pay the United States at the time such overpayment is repaid--
- (1) Simple interest on the amount of such overpayment to be computed from the date(s) of overpayment to the Contractor to the date the Government is repaid by the Contractor at the applicable underpayment rate effective for each quarter prescribed by the Secretary of the Treasury under 26 U.S.C. 6621(a)(2); and

A penalty equal to the amount of the overpayment, if the Contractor or subcontractor knowingly submitted cost or pricing data that were incomplete, inaccurate, or noncurrent.

(End of clause)

52.215-13 SUBCONTRACTOR COST OR PRICING DATA--MODIFICATIONS (OCT 1997)

- (a) The requirements of paragraphs (b) and (c) of this clause shall--
- (1) Become operative only for any modification to this contract involving a pricing adjustment expected to exceed the threshold for submission of cost or pricing data at FAR 15.403-4; and
- (2) Be limited to such modifications.
- (b) Before awarding any subcontract expected to exceed the threshold for submission of cost or pricing data at FAR 15.403-4, on the date of agreement on price or the date of award, whichever is later; or before pricing any subcontract modification involving a pricing adjustment expected to exceed the threshold for submission of cost or pricing data at FAR 15.403-4, the Contractor shall require the subcontractor to submit cost or pricing data (actually or by specific identification in writing), unless an exception under FAR 15.403-1 applies.
- (c) The Contractor shall require the subcontractor to certify in substantially the form prescribed in FAR 15.406-2 that, to the best of its knowledge and belief, the data submitted under paragraph (b) of this clause were accurate, complete, and current as of the date of agreement on the negotiated price of the subcontract or subcontract modification.

The Contractor shall insert the substance of this clause, including this paragraph (d), in each subcontract that exceeds the threshold for submission of cost or pricing data at FAR 15.403-4 on the date of agreement on price or the date of award, whichever is later.

(End of clause)

52.215-15 PENSION ADJUSTMENTS AND ASSET REVERSIONS (OCT 2004)

- (a) The Contractor shall promptly notify the Contracting Officer in writing when it determines that it will terminate a defined-benefit pension plan or otherwise recapture such pension fund assets.
- (b) For segment closings, pension plan terminations, or curtailment of benefits, the amount of the adjustment shall be--
- (1) For contracts and subcontracts that are subject to full coverage under the Cost Accounting Standards (CAS) Board rules and regulations (48 CFR Chapter 99), the amount measured, assigned, and allocated in accordance with 48 CFR 9904.413-50(c)(12); and
- (2) For contracts and subcontracts that are not subject to full coverage under the CAS, the amount measured, assigned, and allocated in accordance with 48 CFR 9904.413-50(c)(12), except the numerator of the fraction at 48 CFR 9904.413-50(c)(12)(vi) shall be the sum of the pension plan costs allocated to all non-CAS covered contracts and subcontracts that are subject to Federal Acquisition Regulation (FAR) Subpart 31.2 or for which cost or pricing data were submitted.
- (c) For all other situations where assets revert to the Contractor, or such assets are constructively received by it for any reason, the Contractor shall, at the Government's option, make a refund or give a credit to the Government for its equitable share of the gross amount withdrawn. The Government's equitable share shall reflect the Government's participation in pension costs through those contracts for which cost or pricing data were submitted or that are subject to FAR Subpart 31.2.
- (d) The Contractor shall include the substance of this clause in all subcontracts under this contract that meet the applicability requirement of FAR 15.408(g).

(End of clause)

52.215-18 REVERSION OR ADJUSTMENT OF PLANS FOR POSTRETIREMENT BENEFITS (PRB) OTHER THAN PENSIONS (JUL 2005)

- (a) The Contractor shall promptly notify the Contracting Officer in writing when the Contractor determines that it will terminate or reduce the benefits of a PRB plan.
- (b) If PRB fund assets revert or inure to the Contractor, or are constructively received by it under a plan termination or otherwise, the Contractor shall make a refund or give a credit to the Government for its equitable share as required by 31.205-6(o)(5) of the Federal Acquisition Regulation (FAR). When determining or agreeing on the method for recovery of the Government's equitable share, the contracting parties should consider the following methods: cost reduction, amortizing the credit over a number of years (with appropriate interest), cash refund, or some other agreed upon method. Should the parties be unable to agree on the method for recovery of the Government's equitable share, through good faith negotiations, the Contracting Officer shall designate the method of recovery.
- (c) The Contractor shall insert the substance of this clause in all subcontracts that meet the applicability requirements of FAR 15.408(j).

(End of clause)

52.215-19 NOTIFICATION OF OWNERSHIP CHANGES (OCT 1997)

- (a) The Contractor shall make the following notifications in writing:
- (1) When the Contractor becomes aware that a change in its ownership has occurred, or is certain to occur, that could result in changes in the valuation of its capitalized assets in the accounting records, the Contractor shall notify the Administrative Contracting Officer (ACO) within 30 days.
- (2) The Contractor shall also notify the ACO within 30 days whenever changes to asset valuations or any other cost changes have occurred or are certain to occur as a result of a change in ownership.
- (b) The Contractor shall--
- (1) Maintain current, accurate, and complete inventory records of assets and their costs;
- (2) Provide the ACO or designated representative ready access to the records upon request;
- (3) Ensure that all individual and grouped assets, their capitalized values, accumulated depreciation or amortization, and remaining useful lives are identified accurately before and after each of the Contractor's ownership changes; and
- (4) Retain and continue to maintain depreciation and amortization schedules based on the asset records maintained before each Contractor ownership change.

The Contractor shall include the substance of this clause in all subcontracts under this contract that meet the applicability requirement of FAR 15.408(k).

(End of clause)

52.215-20 REQUIREMENTS FOR COST OR PRICING DATA OR INFORMATION OTHER THAN COST OR PRICING DATA (OCT 1997)

- (a) Exceptions from cost or pricing data. (1) In lieu of submitting cost or pricing data, offerors may submit a written request for exception by submitting the information described in the following subparagraphs. The Contracting Officer may require additional supporting information, but only to the extent necessary to determine whether an exception should be granted, and whether the price is fair and reasonable.
- (i) Identification of the law or regulation establishing the price offered. If the price is controlled under law by periodic rulings, reviews, or similar actions of a governmental body, attach a copy of the controlling document, unless it was previously submitted to the contracting office.
- (ii) Commercial item exception. For a commercial item exception, the offeror shall submit, at a minimum, information on prices at which the same item or similar items have previously been sold in the commercial market that is adequate for evaluating the reasonableness of the price for this acquisition. Such information may include-
- (A) For catalog items, a copy of or identification of the catalog and its date, or the appropriate pages for the offered items, or a statement that the catalog is on file in the buying office to which the proposal is being submitted. Provide a copy or describe current discount policies and price lists (published or unpublished), e.g., wholesale, original equipment manufacturer, or reseller. Also explain the basis of each offered price and its relationship to the established catalog price, including how the proposed price relates to the price of recent sales in quantities similar to the proposed quantities;

- (B) For market-priced items, the source and date or period of the market quotation or other basis for market price, the base amount, and applicable discounts. In addition, describe the nature of the market;
- (C) For items included on an active Federal Supply Service Multiple Award Schedule contract, proof that an exception has been granted for the schedule item.
- (2) The offeror grants the Contracting Officer or an authorized representative the right to examine, at any time before award, books, records, documents, or other directly pertinent records to verify any request for an exception under this provision, and the reasonableness of price. For items priced using catalog or market prices, or law or regulation, access does not extend to cost or profit information or other data relevant solely to the offeror's determination of the prices to be offered in the catalog or marketplace.
- (b) Requirements for cost or pricing data. If the offeror is not granted an exception from the requirement to submit cost or pricing data, the following applies:
- (1) The offeror shall prepare and submit cost or pricing data and supporting attachments in accordance with Table 15-2 of FAR 15.408.

As soon as practicable after agreement on price, but before contract award (except for unpriced actions such as letter contracts), the offeror shall submit a Certificate of Current Cost or Pricing Data, as prescribed by FAR 15.406-2.

(End of provision)

52.215-21 REQUIREMENTS FOR COST OR PRICING DATA OR INFORMATION OTHER THAN COST OR PRICING DATA--MODIFICATIONS (OCT 1997)

- (a) Exceptions from cost or pricing data. (1) In lieu of submitting cost or pricing data for modifications under this contract, for price adjustments expected to exceed the threshold set forth at FAR 15.403-4 on the date of the agreement on price or the date of the award, whichever is later, the Contractor may submit a written request for exception by submitting the information described in the following subparagraphs. The Contracting Officer may require additional supporting information, but only to the extent necessary to determine whether an exception should be granted, and whether the price is fair and reasonable--
- (i) Identification of the law or regulation establishing the price offered. If the price is controlled under law by periodic rulings, reviews, or similar actions of a governmental body, attach a copy of the controlling document, unless it was previously submitted to the contracting office.
- (ii) Information on modifications of contracts or subcontracts for commercial items. (A) If--
- (1) The original contract or subcontract was granted an exception from cost or pricing data requirements because the price agreed upon was based on adequate price competition or prices set by law or regulation, or was a contract or subcontract for the acquisition of a commercial item; and
- (2) The modification (to the contract or subcontract) is not exempted based on one of these exceptions, then the Contractor may provide information to establish that the modification would not change the contract or subcontract from a contract or subcontract for the acquisition of a commercial item to a contract or subcontract for the acquisition of an item other than a commercial item.
- (B) For a commercial item exception, the Contractor shall provide, at a minimum, information on prices at which the same item or similar items have previously been sold that is adequate for evaluating the reasonableness of the price of the modification. Such information may include--
- (1) For catalog items, a copy of or identification of the catalog and its date, or the appropriate pages for the offered

items, or a statement that the catalog is on file in the buying office to which the proposal is being submitted. Provide a copy or describe current discount policies and price lists (published or unpublished), e.g., wholesale, original equipment manufacturer, or reseller. Also explain the basis of each offered price and its relationship to the established catalog price, including how the proposed price relates to the price of recent sales in quantities similar to the proposed quantities.

- (2) For market-priced items, the source and date or period of the market quotation or other basis for market price, the base amount, and applicable discounts. In addition, describe the nature of the market.
- (3) For items included on an active Federal Supply Service Multiple Award Schedule contract, proof that an exception has been granted for the schedule item.
- (2) The Contractor grants the Contracting Officer or an authorized representative the right to examine, at any time before award, books, records, documents, or other directly pertinent records to verify any request for an exception under this clause, and the reasonableness of price. For items priced using catalog or market prices, or law or regulation, access does not extend to cost or profit information or other data relevant solely to the Contractor's determination of the prices to be offered in the catalog or marketplace.
- (b) Requirements for cost or pricing data. If the Contractor is not granted an exception from the requirement to submit cost or pricing data, the following applies:
- (1) The Contractor shall submit cost or pricing data and supporting attachments in accordance with Table 15-2 of FAR 15.408.

As soon as practicable after agreement on price, but before award (except for unpriced actions), the Contractor shall submit a Certificate of Current Cost or Pricing Data, as prescribed by FAR 15.406-2.

(End of clause)

52.217-7 OPTION FOR INCREASED QUANTITY--SEPARATELY PRICED LINE ITEM (MAR 1989)

The Government may require the delivery of the numbered line item, identified in the Schedule as an option item, in the quantity and at the price stated in the Schedule. The Contracting Officer may exercise the option by written notice to the Contractor within 90 days after NTP. Delivery of added items shall continue at the same rate that like items are called for under the contract, unless the parties otherwise agree.

(End of clause)

52.223-14 TOXIC CHEMICAL RELEASE REPORTING (AUG 2003)

- (a) Unless otherwise exempt, the Contractor, as owner or operator of a facility used in the performance of this contract, shall file by July 1 for the prior calendar year an annual Toxic Chemical Release Inventory Form (Form R) as described in sections 313(a) and (g) of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (42 U.S.C. 11023(a) and (g)), and section 6607 of the Pollution Prevention Act of 1990 (PPA) (42 U.S.C. 13106). The Contractor shall file, for each facility subject to the Form R filing and reporting requirements, the annual Form R throughout the life of the contract.
- (b) A Contractor-owned or -operated facility used in the performance of this contract is exempt from the requirement to file an annual Form R if--

- (1) The facility does not manufacture, process, or otherwise use any toxic chemicals listed in 40 CFR 372.65;
- (2) The facility does not have 10 or more full-time employees as specified in section 313(b)(1)(A) of EPCRA, 42 U.S.C. 11023(b)(1)(A);
- (3) The facility does not meet the reporting thresholds of toxic chemicals established under of EPCRA, 42 U.S.C. 11023(f) (including the alternate thresholds at 40 CFR 372.27, provided an appropriate certification form has been filed with EPA);
- (4) The facility does not fall within the following Standard Industrial Classification (SIC) codes or their corresponding North American Industry Classification System sectors:
- (i) Major group code 10 (except 1011, 1081, and 1094.
- (ii) Major group code 12 (except 1241).
- (iii) Major group codes 20 through 39.
- (iv) Industry code 4911, 4931, or 4939 (limited to facilities that combust coal and/or oil for the purpose of generating power for distribution in commerce).
- (v) Industry code 4953 (limited to facilities regulated under the Resource Conservation and Recovery Act, Subtitle C (42 U.S.C. 6921, et seq.)), 5169, 5171, or 7389 (limited to facilities primarily engaged in solvent recovery services on a contract or fee basis); or
- (5) The facility is not located in the United States or its outlying areas.
- (c) If the Contractor has certified to an exemption in accordance with one or more of the criteria in paragraph (b) of this clause, and after award of the contract circumstances change so that any of its owned or operated facilities used in the performance of this contract is no longer exempt--
- (1) The Contractor shall notify the Contracting Officer; and
- (2) The Contractor, as owner or operator of a facility used in the performance of this contract that is no longer exempt, shall (i) submit a Toxic Chemical Release Inventory Form (Form R) on or before July 1 for the prior calendar year during which the facility becomes eligible; and (ii) continue to file the annual Form R for the life of the contract for such facility.
- (d) The Contracting Officer may terminate this contract or take other action as appropriate, if the Contractor fails to comply accurately and fully with the EPCRA and PPA toxic chemical release filing and reporting requirements.
- (e) Except for acquisitions of commercial items, as defined in FAR Part 2, the Contractor shall--
- (1) For competitive subcontracts expected to exceed \$100,000 (including all options), include a solicitation provision substantially the same as the provision at FAR 52.223-13, Certification of Toxic Chemical Release Reporting; and
- (2) Include in any resultant subcontract exceeding \$100,000 (including all options), the substance of this clause, except this paragraph (e).

52.225-11 BUY AMERICAN ACT--CONSTRUCTION MATERIALS UNDER TRADE AGREEMENTS (APR 2006)

(a) Definitions. As used in this clause--

Caribbean Basin country construction material means a construction material that--

- (1) Is wholly the growth, product, or manufacture of a Caribbean Basin country; or
- (2) In the case of a construction material that consists in whole or in part of materials from another country, has been substantially transformed in a Caribbean Basin country into a new and different construction material distinct from the materials from which it was transformed.

Component means an article, material, or supply incorporated directly into a construction material.

Construction material means an article, material, or supply brought to the construction site by the Contractor or subcontractor for incorporation into the building or work. The term also includes an item brought to the site preassembled from articles, materials, or supplies. However, emergency life safety systems, such as emergency lighting, fire alarm, and audio evacuation systems, that are discrete systems incorporated into a public building or work and that are produced as complete systems, are evaluated as a single and distinct construction material regardless of when or how the individual parts or components of those systems are delivered to the construction site. Materials purchased directly by the Government are supplies, not construction material.

Cost of components means--

- (1) For components purchased by the Contractor, the acquisition cost, including transportation costs to the place of incorporation into the construction material (whether or not such costs are paid to a domestic firm), and any applicable duty (whether or not a duty-free entry certificate is issued); or
- (2) For components manufactured by the Contractor, all costs associated with the manufacture of the component, including transportation costs as described in paragraph (1) of this definition, plus allocable overhead costs, but excluding profit. Cost of components does not include any costs associated with the manufacture of the construction material.

Designated country means any of the following countries:

- (1) A World Trade Organization Government Procurement Agreement country (Aruba, Austria, Belgium, Canada, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hong Kong, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea (Republic of), Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Singapore, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, or United Kingdom);
- (2) A Free Trade Agreement country (Australia, Canada, Chile, Mexico, Morocco, or Singapore);
- (3) A least developed country (Afghanistan, Angola, Bangladesh, Benin, Bhutan, Burkina Faso, Burundi, Cambodia, Cape Verde, Central African Republic, Chad, Comoros, Democratic Republic of Congo, Djibouti, East Timor, Equatorial Guinea, Eritrea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Haiti, Kiribati, Laos, Lesotho, Madagascar, Malawi, Maldives, Mali, Mauritania, Mozambique, Nepal, Niger, Rwanda, Samoa, Sao Tome and Principe, Senegal, Sierra Leone, Solomon Islands, Somalia, Tanzania, Togo, Tuvalu, Uganda, Vanuatu, Yemen, or Zambia); or
- (4) A Caribbean Basin country (Antigua and Barbuda, Aruba, Bahamas, Barbados, Belize, British Virgin Islands, Costa Rica, Dominica, Dominican Republic, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica,

Montserrat, Netherlands Antilles, Nicaragua, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, or Trinidad and Tobago).

Designated country construction material means a construction material that is a WTO GPA country construction material, an FTA country construction material, a least developed country construction material, or a Caribbean Basin country construction material.

Domestic construction material means--

- (1) An unmanufactured construction material mined or produced in the United States; or
- (2) A construction material manufactured in the United States, if the cost of its components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. Components of foreign origin of the same class or kind for which nonavailability determinations have been made are treated as domestic.

Foreign construction material means a construction material other than a domestic construction material.

Least developed country construction material means a construction material that-

- (1) Is wholly the growth, product, or manufacture of a least developed country; or
- (2) In the case of a construction material that consists in whole or in part of materials from another country, has been substantially transformed in a least developed country into a new and different construction material distinct from the materials from which it was transformed.

United States means the 50 States, the District of Columbia, and outlying areas.

WTO GPA country construction material means a construction material that--

- (1) Is wholly the growth, product, or manufacture of a WTO GPA country; or
- (2) In the case of a construction material that consists in whole or in part of materials from another country, has been substantially transformed in a WTO GPA country into a new and different construction material distinct from the materials from which it was transformed.
- (b) Construction materials. (1) This clause implements the Buy American Act (41 U.S.C. 10a-10d) by providing a preference for domestic construction material. In addition, the Contracting Officer has determined that the WTO GPA and Free Trade Agreements (FTAs) apply to this acquisition. Therefore, the Buy American Act restrictions are waived for designated country construction materials.
- (2) The Contractor shall use only domestic or designated country construction material in performing this contract, except as provided in paragraphs (b)(3) and (b)(4) of this clause.
- (3) The requirement in paragraph (b)(2) of this clause does not apply to the construction materials or components listed by the Government as follows: NONE
- (4) The Contracting Officer may add other foreign construction material to the list in paragraph (b)(3) of this clause if the Government determines that--
- (i) The cost of domestic construction material would be unreasonable. The cost of a particular domestic construction material subject to the restrictions of the Buy American Act is unreasonable when the cost of such material exceeds the cost of foreign material by more than 6 percent;

- (ii) The application of the restriction of the Buy American Act to a particular construction material would be impracticable or inconsistent with the public interest; or
- (iii) The construction material is not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality.
- (c) Request for determination of inapplicability of the Buy American Act.
- (1)(i) Any Contractor request to use foreign construction material in accordance with paragraph (b)(4) of this clause shall include adequate information for Government evaluation of the request, including--
- (A) A description of the foreign and domestic construction materials;
- (B) Unit of measure;
- (C) Quantity;
- (D) Price;
- (E) Time of delivery or availability;
- (F) Location of the construction project;
- (G) Name and address of the proposed supplier; and
- (H) A detailed justification of the reason for use of foreign construction materials cited in accordance with paragraph (b)(3) of this clause.
- (ii) A request based on unreasonable cost shall include a reasonable survey of the market and a completed price comparison table in the format in paragraph (d) of this clause.
- (iii) The price of construction material shall include all delivery costs to the construction site and any applicable duty (whether or not a duty-free certificate may be issued).
- (iv) Any Contractor request for a determination submitted after contract award shall explain why the Contractor could not reasonably foresee the need for such determination and could not have requested the determination before contract award. If the Contractor does not submit a satisfactory explanation, the Contracting Officer need not make a determination.
- (2) If the Government determines after contract award that an exception to the Buy American Act applies and the Contracting Officer and the Contractor negotiate adequate consideration, the Contracting Officer will modify the contract to allow use of the foreign construction material. However, when the basis for the exception is the unreasonable price of a domestic construction material, adequate consideration is not less than the differential established in paragraph (b)(4)(i) of this clause.
- (3) Unless the Government determines that an exception to the Buy American Act applies, use of foreign construction material is noncompliant with the Buy American Act.
- (d) Data. To permit evaluation of requests under paragraph (c) of this clause based on unreasonable cost, the Contractor shall include the following information and any applicable supporting data based on the survey of suppliers:

Foreign and I	Domestic Con	struction Ma	iterials Price (Comparison	

	on material description			
Item 1: Foreign co Domestic Item 2: Foreign co	onstruction material construction material onstruction material construction material			
entry certification and attach summand include other	icate is issued). ddress, telephone number mary. r applicable supporting in	, and contact for suppli		(whether or not a duty-free ttach copy of response; if oral,
(End of clau	se)			
52.225-13	RESTRICTIONS ON C	ERTAIN FOREIGN P	URCHASES (F	EB 2006)
Contractor sl proclamation	hall not acquire, for use in h, Executive order, or stat	n the performance of th ute administered by OF	is contract, any s FAC, or if OFAC	the Department of the Treasury, the supplies or services if any C's implementing regulations at 31 CFR iction of the United States.
imports from economic sa TerList1.htm	n North Korea, into the Un nctions are included in Ol	nited States or its outly FAC's List of Specially at these restrictions, as	ing areas. Lists of Designated Natwell as updates,	and Sudan are prohibited, as are most of entities and individuals subject to tionals and Blocked Persons at is available in the OFAC's regulations ices/enforcement/ofac/.
(c) The Cont	tractor shall insert this cla	use, including this para	graph (c), in all	subcontracts.
(End of claus	se)			
52.225-14 (FEB 2000)	INCONSISTENCY BE	TWEEN ENGLISH VI	ERSION AND T	TRANSLATION OF CONTRACT

52.227-2 NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT (AUG

In the event of inconsistency between any terms of this contract and any translation into another language, the

English language meaning shall control.

(End of clause)

1996)

(a) The Contractor shall report to the Contracting Officer, promptly and in reasonable written detail, each notice or claim of patent or copyright infringement based on the performance of this contract of which the Contractor has knowledge.

- (b) In the event of any claim or suit against the Government on account of any alleged patent or copyright infringement arising out of the performance of this contract or out of the use of any supplies furnished or work or services performed under this contract, the Contractor shall furnish to the Government, when requested by the Contracting Officer, all evidence and information in possession of the Contractor pertaining to such suit or claim. Such evidence and information shall be furnished at the expense of the Government except where the Contractor has agreed to indemnify the Government.
- (c) The Contractor agrees to include, and require inclusion of, this clause in all subcontracts at any tier for supplies or services (including construction and architect-engineer subcontracts and those for material, supplies, models, samples, or design or testing services) expected to exceed the simplified acquisition threshold at (FAR) 2.101.to exceed the dollar amount set forth in 13.000 of the Federal Acquisition Regulation (FAR).

52.227-4 PATENT INDEMNITY--CONSTRUCTION CONTRACTS (APR 1984)

Except as otherwise provided, the Contractor agrees to indemnify the Government and its officers, agents, and employees against liability, including costs and expenses, for infringement upon any United States patent (except a patent issued upon an application that is now or may hereafter be withheld from issue pursuant to a Secrecy Order under 35 U.S.C. 181) arising out of performing this contract or out of the use or disposal by or for the account of the Government of supplies furnished or work performed under this contract.

(End of clause)

52.228-3 WORKERS' COMPENSATION INSURANCE (DEFENSE BASE ACT) (APR 1984)

The Contractor shall (a) provide, before commencing performance under this contract, such workers' compensation insurance or security as the Defense Base Act (42 U.S.C. 1651, et seq.) requires and (b) continue to maintain it until performance is completed. The Contractor shall insert, in all subcontracts under this contract to which the Defense Base Act applies, a clause similar to this clause (including this sentence) imposing upon those subcontractors this requirement to comply with the Defense Base Act.

(End of clause)

52.229-6 TAXES--FOREIGN FIXED-PRICE CONTRACTS (JUN 2003)

- (a) To the extent that this contract provides for furnishing supplies or performing services outside the United States and its outlying areas, this clause applies in lieu of any Federal, State, and local taxes clause of the contract.
- (b) Definitions. As used in this clause--

"Contract date," means the date set for bid opening or, if this is a negotiated contract or a modification, the effective date of this contract or modification.

Country concerned means any country, other than the United States and its outlying areas, in which expenditures under this contract are made.

"Tax" and "taxes," include fees and charges for doing business that are levied by the government of the country concerned or by its political subdivisions.

"All applicable taxes and duties," means all taxes and duties, in effect on the contract date, that the taxing authority is imposing and collecting on the transactions or property covered by this contract, pursuant to written ruling or regulation in effect on the contract date.

"After-imposed tax," means any new or increased tax or duty, or tax that was exempted or excluded on the contract date but whose exemption was later revoked or reduced during the contract period, other than excepted tax, on the transactions or property covered by this contract that the Contractor is required to pay or bear as the result of legislative, judicial, or administrative action taking effect after the contract date.

"After-relieved tax," means any amount of tax or duty, other than an excepted tax, that would otherwise have been payable on the transactions or property covered by this contract, but which the Contractor is not required to pay or bear, or for which the Contractor obtains a refund, as the result of legislative, judicial, or administrative action taking effect after the contract date.

"Excepted tax," means social security or other employment taxes, net income and franchise taxes, excess profits taxes, capital stock taxes, transportation taxes, unemployment compensation taxes, and property taxes. "Excepted tax" does not include gross income taxes levied on or measured by sales or receipts from sales, property taxes assessed on completed supplies covered by this contract, or any tax assessed on the Contractor's possession of, interest in, or use of property, title to which is in the U.S. Government.

- (c) Unless otherwise provided in this contract, the contract price includes all applicable taxes and duties, except taxes and duties that the Government of the United States and the government of the country concerned have agreed shall not be applicable to expenditures in such country by or on behalf of the United States.
- (d) The contract price shall be increased by the amount of any after-imposed tax or of any tax or duty specifically excluded from the contract price by a provision of this contract that the Contractor is required to pay or bear, including any interest or penalty, if the Contractor states in writing that the contract price does not include any contingency for such tax and if liability for such tax, interest, or penalty was not incurred through the Contractor's fault, negligence, or failure to follow instructions of the Contracting Officer or to comply with the provisions of paragraph (i) below.
- (e) The contract price shall be decreased by the amount of any after-relieved tax, including any interest or penalty. The Government of the United States shall be entitled to interest received by the Contractor incident to a refund of taxes to the extent that such interest was earned after the Contractor was paid by the Government of the United States for such taxes. The Government of the United States shall be entitled to repayment of any penalty refunded to the Contractor to the extent that the penalty was paid by the Government.
- (f) The contract price shall be decreased by the amount of any tax or duty, other than an excepted tax, that was included in the contract and that the Contractor is required to pay or bear, or does not obtain a refund of, through the Contractor's fault, negligence, or failure to follow instructions of the Contracting Officer or to comply with the provisions of paragraph (i) below.
- (g) No adjustment shall be made in the contract price under this clause unless the amount of the adjustment exceeds \$250.
- (h) If the Contractor obtains a reduction in tax liability under the United States Internal Revenue Code (Title 26, U.S. Code) because of the payment of any tax or duty that either was included in the contract price or was the basis of an increase in the contract price, the amount of the reduction shall be paid or credited to the Government of the United States as the Contracting Officer directs.
- (i) The Contractor shall take all reasonable action to obtain exemption from or refund of any taxes or duties,

including interest or penalty, from which the United States Government, the Contractor, any subcontractor, or the transactions or property covered by this contract are exempt under the laws of the country concerned or its political subdivisions or which the governments of the United States and of the country concerned have agreed shall not be applicable to expenditures in such country by or on behalf of the United States.

(j) The Contractor shall promptly notify the Contracting Officer of all matters relating to taxes or duties that reasonably may be expected to result in either an increase or decrease in the contract price and shall take appropriate action as the Contracting Officer directs. The contract price shall be equitably adjusted to cover the costs of action taken by the Contractor at the direction of the Contracting Officer, including any interest, penalty, and reasonable attorneys' fees.

(End of clause)

52.230-2 COST ACCOUNTING STANDARDS (APR 1998)

- (a) Unless the contract is exempt under 48 CFR 9903.201-1 and 9903.201-2, the provisions of 48 CFR Part 9903 are incorporated herein by reference and the Contractor, in connection with this contract, shall--
- (1) (CAS-covered Contracts Only) By submission of a Disclosure Statement, disclose in writing the Contractor's cost accounting practices as required by 48 CFR 9903.202-1 through 9903.202-5, including methods of distinguishing direct costs from indirect costs and the basis used for allocating indirect costs. The practices disclosed for this contract shall be the same as the practices currently disclosed and applied on all other contracts and subcontracts being performed by the Contractor and which contain a Cost Accounting Standards (CAS) clause. If the Contractor has notified the Contracting Officer that the Disclosure Statement contains trade secrets and commercial or financial information which is privileged and confidential, the Disclosure Statement shall be protected and shall not be released outside of the Government.
- (2) Follow consistently the Contractor's cost accounting practices in accumulating and reporting contract performance cost data concerning this contract. If any change in cost accounting practices is made for the purposes of any contract or subcontract subject to CAS requirements, the change must be applied prospectively to this contract and the Disclosure Statement must be amended accordingly. If the contract price or cost allowance of this contract is affected by such changes, adjustment shall be made in accordance with subparagraph (a)(4) or (a)(5) of this clause, as appropriate.
- (3) Comply with all CAS, including any modifications and interpretations indicated thereto contained in 48 CFR Part 9904, in effect on the date of award of this contract or, if the Contractor has submitted cost or pricing data, on the date of final agreement on price as shown on the Contractor's signed certificate of current cost or pricing data. The Contractor shall also comply with any CAS (or modifications to CAS) which hereafter become applicable to a contract or subcontract of the Contractor. Such compliance shall be required prospectively from the date of applicability to such contract or subcontract.
- (4)(i) Agree to an equitable adjustment as provided in the Changes clause of this contract if the contract cost is affected by a change which, pursuant to subparagraph (a)(3) of this clause, the Contractor is required to make to the Contractor's established cost accounting practices.
- (ii) Negotiate with the Contracting Officer to determine the terms and conditions under which a change may be made to a cost accounting practice, other than a change made under other provisions of subparagraph (a)(4) of this clause; provided that no agreement may be made under this provision that will increase costs paid by the United States.
- (iii) When the parties agree to a change to a cost accounting practice, other than a change under subdivision (a)(4)(i) of this clause, negotiate an equitable adjustment as provided in the Changes clause of this contract.

- (5) Agree to an adjustment of the contract price or cost allowance, as appropriate, if the Contractor or a subcontractor fails to comply with an applicable Cost Accounting Standard, or to follow any cost accounting practice consistently and such failure results in any increased costs paid by the United States. Such adjustment shall provide for recovery of the increased costs to the United States, together with interest thereon computed at the annual rate established under section 6621 of the Internal Revenue Code of 1986 (26 U.S.C. 6621) for such period, from the time the payment by the United States was made to the time the adjustment is effected. In no case shall the Government recover costs greater than the increased cost to the Government, in the aggregate, on the relevant contracts subject to the price adjustment, unless the Contractor made a change in its cost accounting practices of which it was aware or should have been aware at the time of price negotiations and which it failed to disclose to the Government.
- (b) If the parties fail to agree whether the Contractor or a subcontractor has complied with an applicable CAS in 48 CFR 9904 or a CAS rule or regulation in 48 CFR 9903 and as to any cost adjustment demanded by the United States, such failure to agree will constitute a dispute under the Contract Disputes Act (41 U.S.C. 601).
- (c) The Contractor shall permit any authorized representatives of the Government to examine and make copies of any documents, papers, or records relating to compliance with the requirements of this clause.
- (d) The Contractor shall include in all negotiated subcontracts which the Contractor enters into, the substance of this clause, except paragraph (b), and shall require such inclusion in all other subcontracts, of any tier, including the obligation to comply with all CAS in effect on the subcontractor's award date or if the subcontractor has submitted cost or pricing data, on the date of final agreement on price as shown on the subcontractor's signed Certificate of Current Cost or Pricing Data. If the subcontract is awarded to a business unit which pursuant to 48 CFR 9903.201-2 is subject to other types of CAS coverage, the substance of the applicable clause set forth in subsection 30.201-4 of the Federal Acquisition Regulation shall be inserted. This requirement shall apply only to negotiated subcontracts in excess of \$500,000, except that the requirement shall not apply to negotiated subcontracts otherwise exempt from the requirement to include a CAS clause as specified in 48 CFR 9903.201-1.

52.230-3 DISCLOSURE AND CONSISTENCY OF COST ACCOUNTING PRACTICES (APR 1998)

- (a) The Contractor, in connection with this contract, shall--
- (1) Comply with the requirements of 48 CFR 9904.401, Consistency in Estimating, Accumulating, and Reporting Costs; 48 CFR 9904.402, Consistency in Allocating Costs Incurred for the Same Purpose; 48 CFR 9904.405, Accounting for Unallowable Costs; and 48 CFR 9904.406, Cost Accounting Standard--Cost Accounting Period, in effect on the date of award of this contract as indicated in 48 CFR Part 9904.
- (2) (CAS-covered Contracts Only) If it is a business unit of a company required to submit a Disclosure Statement, disclose in writing its cost accounting practices as required by 48 CFR 9903.202-1 through 9903.202-5. If the Contractor has notified the Contracting Officer that the Disclosure Statement contains trade secrets and commercial or financial information which is privileged and confidential, the Disclosure Statement shall be protected and shall not be released outside of the Government.
- (3)(i) Follow consistently the Contractor's cost accounting practices. A change to such practices may be proposed, however, by either the Government or the Contractor, and the Contractor agrees to negotiate with the Contracting Officer the terms and conditions under which a change may be made. After the terms and conditions under which the change is to be made have been agreed to, the change must be applied prospectively to this contract, and the Disclosure Statement, if affected, must be amended accordingly.

- (ii) The Contractor shall, when the parties agree to a change to a cost accounting practice and the Contracting Officer has made the finding required in 48 CFR 9903.201-6(b), that the change is desirable and not detrimental to the interests of the Government, negotiate an equitable adjustment as provided in the Changes clause of this contract. In the absence of the required finding, no agreement may be made under this contract clause that will increase costs paid by the United States.
- (4) Agree to an adjustment of the contract price or cost allowance, as appropriate, if the Contractor or a subcontractor fails to comply with the applicable CAS or to follow any cost accounting practice, and such failure results in any increased costs paid by the United States. Such adjustment shall provide for recovery of the increased costs to the United States together with interest thereon computed at the annual rate of interest established under the Internal Revenue Code of 1986 (26 U.S.C. 6621), from the time the payment by the United States was made to the time the adjustment is effected.
- (b) If the parties fail to agree whether the Contractor has complied with an applicable CAS, rule, or regulation as specified in 48 CFR 9903 and 9904 and as to any cost adjustment demanded by the United States, such failure to agree will constitute a dispute under the Contract Disputes Act (41 U.S.C. 601).
- (c) The Contractor shall permit any authorized representatives of the Government to examine and make copies of any documents, papers, and records relating to compliance with the requirements of this clause.
- (d) The Contractor shall include in all negotiated subcontracts, which the Contractor enters into, the substance of this clause, except paragraph (b), and shall require such inclusion in all other subcontracts of any tier, except that-
- (1) If the subcontract is awarded to a business unit which pursuant to 48 CFR 9903.201-2 is subject to other types of CAS coverage, the substance of the applicable clause set forth in subsection 30.201-4 of the Federal Acquisition Regulation shall be inserted.
- (2) This requirement shall apply only to negotiated subcontracts in excess of \$500,000.
- (3) The requirement shall not apply to negotiated subcontracts otherwise exempt from the requirement to include a CAS clause as specified in 48 CFR 9903.201-1.

52.232-5 PAYMENTS UNDER FIXED-PRICE CONSTRUCTION CONTRACTS (SEP 2002)

- (a) Payment of price. The Government shall pay the Contractor the contract price as provided in this contract.
- (b) Progress payments. The Government shall make progress payments monthly as the work proceeds, or at more frequent intervals as determined by the Contracting Officer, on estimates of work accomplished which meets the standards of quality established under the contract, as approved by the Contracting Officer.
- (1) The Contractor's request for progress payments shall include the following substantiation:
- (i) An itemization of the amounts requested, related to the various elements of work required by the contract covered by the payment requested.
- (ii) A listing of the amount included for work performed by each subcontractor under the contract.
- (iii) A listing of the total amount of each subcontract under the contract.
- (iv) A listing of the amounts previously paid to each such subcontractor under the contract.

- (v) Additional supporting data in a form and detail required by the Contracting Officer.
- (2) In the preparation of estimates, the Contracting Officer may authorize material delivered on the site and preparatory work done to be taken into consideration. Material delivered to the Contractor at locations other than the site also may be taken into consideration if--
- (i) Consideration is specifically authorized by this contract; and
- (ii) The Contractor furnishes satisfactory evidence that it has acquired title to such material and that the material will be used to perform this contract.
- (c) Contractor certification. Along with each request for progress payments, the Contractor shall furnish the following certification, or payment shall not be made: (However, if the Contractor elects to delete paragraph (c)(4) from the certification, the certification is still acceptable.)

I hereby certify, to the best of my knowledge and belief, that--

- (1) The amounts requested are only for performance in accordance with the specifications, terms, and conditions of the contract;
- (2) All payments due to subcontractors and suppliers from previous payments received under the contract have been made, and timely payments will be made from the proceeds of the payment covered by this certification, in accordance with subcontract agreements and the requirements of chapter 39 of Title 31, United States Code;
- (3) This request for progress payments does not include any amounts which the prime contractor intends to withhold or retain from a subcontractor or supplier in accordance with the terms and conditions of the subcontract; and

(4) This certification is not	t to be construed as final acceptance of a subcontractor's performance.
(Name)	
(Title)	_
(Date)	_

- (d) Refund of unearned amounts. If the Contractor, after making a certified request for progress payments, discovers that a portion or all of such request constitutes a payment for performance by the Contractor that fails to conform to the specifications, terms, and conditions of this contract (hereinafter referred to as the "unearned amount"), the Contractor shall--
- (1) Notify the Contracting Officer of such performance deficiency; and
- (2) Be obligated to pay the Government an amount (computed by the Contracting Officer in the manner provided in paragraph (j) of this clause) equal to interest on the unearned amount from the 8th day after the date of receipt of the unearned amount until--
- (i) The date the Contractor notifies the Contracting Officer that the performance deficiency has been corrected; or

- (ii) The date the Contractor reduces the amount of any subsequent certified request for progress payments by an amount equal to the unearned amount.
- (e) Retainage. If the Contracting Officer finds that satisfactory progress was achieved during any period for which a progress payment is to be made, the Contracting Officer shall authorize payment to be made in full. However, if satisfactory progress has not been made, the Contracting Officer may retain a maximum of 10 percent of the amount of the payment until satisfactory progress is achieved. When the work is substantially complete, the Contracting Officer may retain from previously withheld funds and future progress payments that amount the Contracting Officer considers adequate for protection of the Government and shall release to the Contractor all the remaining withheld funds. Also, on completion and acceptance of each separate building, public work, or other division of the contract, for which the price is stated separately in the contract, payment shall be made for the completed work without retention of a percentage.
- (f) Title, liability, and reservation of rights. All material and work covered by progress payments made shall, at the time of payment, become the sole property of the Government, but this shall not be construed as--
- (1) Relieving the Contractor from the sole responsibility for all material and work upon which payments have been made or the restoration of any damaged work; or
- (2) Waiving the right of the Government to require the fulfillment of all of the terms of the contract.
- (g) Reimbursement for bond premiums. In making these progress payments, the Government shall, upon request, reimburse the Contractor for the amount of premiums paid for performance and payment bonds (including coinsurance and reinsurance agreements, when applicable) after the Contractor has furnished evidence of full payment to the surety. The retainage provisions in paragraph (e) of this clause shall not apply to that portion of progress payments attributable to bond premiums.
- (h) Final payment. The Government shall pay the amount due the Contractor under this contract after-
- (1) Completion and acceptance of all work;
- (2) Presentation of a properly executed voucher; and
- (3) Presentation of release of all claims against the Government arising by virtue of this contract, other than claims, in stated amounts, that the Contractor has specifically excepted from the operation of the release. A release may also be required of the assignee if the Contractor's claim to amounts payable under this contract has been assigned under the Assignment of Claims Act of 1940 (31 U.S.C. 3727 and 41 U.S.C. 15).
- (i) Limitation because of undefinitized work. Notwithstanding any provision of this contract, progress payments shall not exceed 80 percent on work accomplished on undefinitized contract actions. A "contract action" is any action resulting in a contract, as defined in FAR Subpart 2.1, including contract modifications for additional supplies or services, but not including contract modifications that are within the scope and under the terms of the contract, such as contract modifications issued pursuant to the Changes clause, or funding and other administrative changes.
- (j) Interest computation on unearned amounts. In accordance with 31 U.S.C. 3903(c)(1), the amount payable under subparagraph (d)(2) of this clause shall be--
- (1) Computed at the rate of average bond equivalent rates of 91-day Treasury bills auctioned at the most recent auction of such bills prior to the date the Contractor receives the unearned amount; and
- (2) Deducted from the next available payment to the Contractor.

52.232-10 PAYMENTS UNDER FIXED-PRICE ARCHITECT-ENGINEER CONTRACTS (AUG 1987)

- (a) Estimates shall be made monthly of the amount and value of the work and services performed by the Contractor under this contract which meet the standards of quality established under this contract. The estimates shall be prepared by the Contractor and accompanied by any supporting data required by the Contracting Officer.
- (b) Upon approval of the estimate by the Contracting Officer, payment upon properly executed vouchers shall be made to the Contractor, as soon as practicable, of 90 percent of the approved amount, less all previous payments; provided, that payment may be made in full during any months in which the Contracting Officer determines that performance has been satisfactory. Also, whenever the Contracting Officer determines that the work is substantially complete and that the amount retained is in excess of the amount adequate for the protection of the Government, the Contracting Officer may release the excess amount to the Contractor.
- (c) Upon satisfactory completion by the Contractor and acceptance by the Contracting Officer of the work done by the Contractor under the "Statement of Architect-Engineer Services", the Contractor will be paid the unpaid balance of any money due for work under the statement, including retained percentages relating to this portion of the work. Upon satisfactory completion and final acceptance of the construction work, the Contractor shall be paid any unpaid balance of money due under this contract.
- (d) Before final payment under the contract, or before settlement upon termination of the contract, and as a condition precedent thereto, the Contractor shall execute and deliver to the Contracting Officer a release of all claims against the Government arising under or by virtue of this contract, other than any claims that are specifically excepted by the Contractor from the operation of the release in amounts stated in the release.
- (e) Notwithstanding any other provision in this contract, and specifically paragraph (b) of this clause, progress payments shall not exceed 80 percent on work accomplished on undefinitized contract actions. A "contract action" is any action resulting in a contract, as defined in FAR Subpart 2.1, including contract modifications for additional supplies or services, but not including contract modifications that are within the scope and under the terms of the contract, such as contract modifications issued pursuant to the Changes clause, or funding and other administrative changes.

(End of clause)

52.232-17 INTEREST (JUNE 1996)

- (a) Except as otherwise provided in this contract under a Price Reduction for Defective Cost or Pricing Data clause or a Cost Accounting Standards clause, all amounts that become payable by the Contractor to the Government under this contract (net of any applicable tax credit under the Internal Revenue Code (26 U.S.C. 1481)) shall bear simple interest from the date due until paid unless paid within 30 days of becoming due. The interest rate shall be the interest rate established by the Secretary of the Treasury as provided in Section 12 of the Contract Disputes Act of 1978 (Public Law 95-563), which is applicable to the period in which the amount becomes due, as provided in paragraph (b) of this clause, and then at the rate applicable for each six-month period as fixed by the Secretary until the amount is paid. reproduce, prepare derivative works, distribute copies to the public, and (b) Amounts shall be due at the earliest of the following dates:
- (1) The date fixed under this contract.

- (2) The date of the first written demand for payment consistent with this contract, including any demand resulting from a default termination.
- (3) The date the Government transmits to the Contractor a proposed supplemental agreement to confirm completed negotiations establishing the amount of debt.
- (4) If this contract provides for revision of prices, the date of written notice to the Contractor stating the amount of refund payable in connection with a pricing proposal or a negotiated pricing agreement not confirmed by contract modification.
- (c) The interest charge made under this clause may be reduced under the procedures prescribed in 32.614-2 of the Federal Acquisition Regulation in effect on the date of this contract.

52.232-18 AVAILABILITY OF FUNDS (APR 1984)

Funds are not presently available for this contract. The Government's obligation under this contract is contingent upon the availability of appropriated funds from which payment for contract purposes can be made. No legal liability on the part of the Government for any payment may arise until funds are made available to the Contracting Officer for this contract and until the Contractor receives notice of such availability, to be confirmed in writing by the Contracting Officer.

(End of clause)

52.232-23 ASSIGNMENT OF CLAIMS (JAN 1986)

- (a) The Contractor, under the Assignment of Claims Act, as amended, 31 U.S.C. 3727, 41 U.S.C. 15 (hereafter referred to as "the Act"), may assign its rights to be paid amounts due or to become due as a result of the performance of this contract to a bank, trust company, or other financing institution, including any Federal lending agency. The assignee under such an assignment may thereafter further assign or reassign its right under the original assignment to any type of financing institution described in the preceding sentence.
- (b) Any assignment or reassignment authorized under the Act and this clause shall cover all unpaid amounts payable under this contract, and shall not be made to more than one party, except that an assignment or reassignment may be made to one party as agent or trustee for two or more parties participating in the financing of this contract.
- (c) The Contractor shall not furnish or disclose to any assignee under this contract any classified document (including this contract) or information related to work under this contract until the Contracting Officer authorizes such action in writing.

(End of clause)

52.232-26 PROMPT PAYMENT FOR FIXED-PRICE ARCHITECT-ENGINEER CONTRACTS (OCT 2003)

Notwithstanding any other payment terms in this contract, the Government will make invoice payments under the terms and conditions specified in this clause. The Government considers payment as being made on the day a check is dated or the date of an electronic funds transfer. Definitions of pertinent terms are set forth in sections 2.101,

- 32.001, and 32.902 of the Federal Acquisition Regulation. All days referred to in this clause are calendar days, unless otherwise specified. (However, see paragraph (a)(3) of this clause concerning payments due on Saturdays, Sundays, and legal holidays.)
- (a) Invoice payments--(1) Due date. The due date for making invoice payments is--
- (i) For work or services completed by the Contractor, the later of the following two events:
- (A) The 30th day after the designated billing office receives a proper invoice from the Contractor (except as provided in paragraph (a)(1)(iii) of this clause).
- (B) The 30th day after Government acceptance of the work or services completed by the Contractor. For a final invoice, when the payment amount is subject to contract settlement actions (e.g., release of claims), acceptance is deemed to occur on the effective date of the settlement.
- (ii) The due date for progress payments is the 30th day after Government approval of Contractor estimates of work or services accomplished.
- (iii) If the designated billing office fails to annotate the invoice or payment request with the actual date of receipt at the time of receipt, the payment due date is the 30th day after the date of the Contractor's invoice or payment request, provided the designated billing office receives a proper invoice or payment request and there is no disagreement over quantity, quality, or Contractor compliance with contract requirements.
- (2) Contractor's invoice. The Contractor shall prepare and submit invoices to the designated billing office specified in the contract. A proper invoice must include the items listed in paragraphs (a)(2)(i) through (a)(2)(x) of this clause. If the invoice does not comply with these requirements, the designated billing office will return it within 7 days after receipt, with the reasons why it is not a proper invoice. When computing any interest penalty owed the Contractor, the Government will take into account if the Government notifies the Contractor of an improper invoice in an untimely manner.
- (i) Name and address of the Contractor.
- (ii) Invoice date and invoice number. (The Contractor should date invoices as close as possible to the date of mailing or transmission.)
- (iii) Contract number or other authorization for work or services performed (including order number and contract line item number).
- (iv) Description of work or services performed.
- (v) Delivery and payment terms (e.g., discount for prompt payment terms).
- (vi) Name and address of Contractor official to whom payment is to be sent (must be the same as that in the contract or in a proper notice of assignment).
- (vii) Name (where practicable), title, phone number, and mailing address of person to notify in the event of a defective invoice.
- (viii) Taxpayer Identification Number (TIN). The Contractor shall include its TIN on the invoice only if required elsewhere in this contract.
- (ix) Electronic funds transfer (EFT) banking information.
- (A) The Contractor shall include EFT banking information on the invoice only if required elsewhere in this contract.

- (B) If EFT banking information is not required to be on the invoice, in order for the invoice to be a proper invoice, the Contractor shall have submitted correct EFT banking information in accordance with the applicable solicitation provision (e.g., 52.232-38, Submission of Electronic Funds Transfer Information with Offer), contract clause (e.g., 52.232-33, Payment by Electronic Funds Transfer--Central Contractor Registration, or 52.232-34, Payment by Electronic Funds Transfer--Other Than Central Contractor Registration), or applicable agency procedures.
- (C) EFT banking information is not required if the Government waived the requirement to pay by EFT.
- (x) Any other information or documentation required by the contract.
- (3) Interest penalty. The designated payment office will pay an interest penalty automatically, without request from the Contractor, if payment is not made by the due date and the conditions listed in paragraphs (a)(3)(i) through (a)(3)(iii) of this clause are met, if applicable. However, when the due date falls on a Saturday, Sunday, or legal holiday, the designated payment office may make payment on the following working day without incurring a late payment interest penalty.
- (i) The designated billing office received a proper invoice.
- (ii) The Government processed a receiving report or other Government documentation authorizing payment and there was no disagreement over quantity, quality, Contractor compliance with any contract term or condition, or requested progress payment amount.
- (iii) In the case of a final invoice for any balance of funds due the Contractor for work or services performed, the amount was not subject to further contract settlement actions between the Government and the Contractor.
- (4) Computing penalty amount. The Government will compute the interest penalty in accordance with the Office of Management and Budget prompt payment regulations at 5 CFR part 1315.
- (i) For the sole purpose of computing an interest penalty that might be due the Contractor, Government acceptance or approval is deemed to occur constructively as shown in paragraphs (a)(4)(i)(A) and (B) of this clause. If actual acceptance or approval occurs within the constructive acceptance or approval period, the Government will base the determination of an interest penalty on the actual date of acceptance or approval. Constructive acceptance or constructive approval requirements do not apply if there is a disagreement over quantity, quality, Contractor compliance with a contract provision, or requested progress payment amounts. These requirements also do not compel Government officials to accept work or services, approve Contractor estimates, perform contract administration functions, or make payment prior to fulfilling their responsibilities.
- (A) For work or services completed by the Contractor, Government acceptance is deemed to occur constructively on the 7th day after the Contractor completes the work or services in accordance with the terms and conditions of the contract.
- (B) For progress payments, Government approval is deemed to occur on the 7th day after the designated billing office receives the Contractor estimates.
- (ii) The prompt payment regulations at 5 CFR 1315.10(c) do not require the Government to pay interest penalties if payment delays are due to disagreement between the Government and the Contractor over the payment amount or other issues involving contract compliance, or on amounts temporarily withheld or retained in accordance with the terms of the contract. The Government and the Contractor shall resolve claims involving disputes, and any interest that may be payable in accordance with the clause at FAR 52.233-1, Disputes.
- (5) Discounts for prompt payment. The designated payment office will pay an interest penalty automatically, without request from the Contractor, if the Government takes a discount for prompt payment improperly. The Government will calculate the interest penalty in accordance with 5 CFR part 1315.

- (6) Additional interest penalty. (i) The designated payment office will pay a penalty amount, calculated in accordance with the prompt payment regulations at 5 CFR part 1315, in addition to the interest penalty amount only if--
- (A) The Government owes an interest penalty of \$1 or more;
- (B) The designated payment office does not pay the interest penalty within 10 days after the date the invoice amount is paid; and
- (C) The contractor makes a written demand to the designated payment office for additional penalty payment, in accordance with paragraph (a)(6)(ii) of this clause, postmarked not later than 40 days after the date the invoice amount is paid.
- (ii)(A) The Contractor shall support written demands for additional penalty payments with the following data. The Government will not request any additional data. The Contractor shall--
- (1) Specifically assert that late payment interest is due under a specific invoice, and request payment of all overdue late payment interest penalty and such additional penalty as may be required;
- (2) Attach a copy of the invoice on which the unpaid late payment interest is due; and
- (3) State that payment of the principal has been received, including the date of receipt.
- (B) If there is no postmark or the postmark is illegible--
- (1) The designated payment office that receives the demand will annotate it with the date of receipt, provided the demand is received on or before the 40th day after payment was made; or
- (2) If the designated payment office fails to make the required annotation, the Government will determine the demand's validity based on the date the Contractor has placed on the demand, provided such date is no later than the 40th day after payment was made.
- (iii) The additional penalty does not apply to payments regulated by other Government regulations (e.g., payments under utility contracts subject to tariffs and regulation).
- (b) Contract financing payments. If this contract provides for contract financing, the Government will make contract financing payments in accordance with the applicable contract financing clause.
- (c) Overpayments. If the Contractor becomes aware of a duplicate contract financing or invoice payment or that the Government has otherwise overpaid on a contract financing or invoice payment, the Contractor shall immediately notify the Contracting Officer and request instructions for disposition of the overpayment.

52.232-27 PROMPT PAYMENT FOR CONSTRUCTION CONTRACTS (SEP 2005)

Notwithstanding any other payment terms in this contract, the Government will make invoice payments under the terms and conditions specified in this clause. The Government considers payment as being made on the day a check is dated or the date of an electronic funds transfer. Definitions of pertinent terms are set forth in sections 2.101, 32.001, and 32.902 of the Federal Acquisition Regulation. All days referred to in this clause are calendar days,

unless otherwise specified. (However, see paragraph (a)(3) concerning payments due on Saturdays, Sundays, and legal holidays.)

- (a) Invoice payments--(1) Types of invoice payments. For purposes of this clause, there are several types of invoice payments that may occur under this contract, as follows:
- (i) Progress payments, if provided for elsewhere in this contract, based on Contracting Officer approval of the estimated amount and value of work or services performed, including payments for reaching milestones in any project.
- (A) The due date for making such payments is 14 days after the designated billing office receives a proper payment request. If the designated billing office fails to annotate the payment request with the actual date of receipt at the time of receipt, the payment due date is the 14th day after the date of the Contractor's payment request, provided the designated billing office receives a proper payment request and there is no disagreement over quantity, quality, or Contractor compliance with contract requirements.
- (B) The due date for payment of any amounts retained by the Contracting Officer in accordance with the clause at 52.232-5, Payments Under Fixed-Price Construction Contracts, is as specified in the contract or, if not specified, 30 days after approval by the Contracting Officer for release to the Contractor.
- (ii) Final payments based on completion and acceptance of all work and presentation of release of all claims against the Government arising by virtue of the contract, and payments for partial deliveries that have been accepted by the Government (e.g., each separate building, public work, or other division of the contract for which the price is stated separately in the contract).
- (A) The due date for making such payments is the later of the following two events:
- (1) The 30th day after the designated billing office receives a proper invoice from the Contractor.
- (2) The 30th day after Government acceptance of the work or services completed by the Contractor. For a final invoice when the payment amount is subject to contract settlement actions (e.g., release of claims), acceptance is deemed to occur on the effective date of the contract settlement.
- (B) If the designated billing office fails to annotate the invoice with the date of actual receipt at the time of receipt, the invoice payment due date is the 30th day after the date of the Contractor's invoice, provided the designated billing office receives a proper invoice and there is no disagreement over quantity, quality, or Contractor compliance with contract requirements.
- (2) Contractor's invoice. The Contractor shall prepare and submit invoices to the designated billing office specified in the contract. A proper invoice must include the items listed in paragraphs (a)(2)(i) through (a)(2)(xi) of this clause. If the invoice does not comply with these requirements, the designated billing office must return it within 7 days after receipt, with the reasons why it is not a proper invoice. When computing any interest penalty owed the Contractor, the Government will take into account if the Government notifies the Contractor of an improper invoice in an untimely manner.
- (i) Name and address of the Contractor.
- (ii) Invoice date and invoice number. (The Contractor should date invoices as close as possible to the date of mailing or transmission.)
- (iii) Contract number or other authorization for work or services performed (including order number and contract line item number).
- (iv) Description of work or services performed.

- (v) Delivery and payment terms (e.g., discount for prompt payment terms).
- (vi) Name and address of Contractor official to whom payment is to be sent (must be the same as that in the contract or in a proper notice of assignment).
- (vii) Name (where practicable), title, phone number, and mailing address of person to notify in the event of a defective invoice.
- (viii) For payments described in paragraph (a)(1)(i) of this clause, substantiation of the amounts requested and certification in accordance with the requirements of the clause at 52.232-5, Payments Under Fixed-Price Construction Contracts.
- (ix) Taxpayer Identification Number (TIN). The Contractor shall include its TIN on the invoice only if required elsewhere in this contract.
- (x) Electronic funds transfer (EFT) banking information.
- (A) The Contractor shall include EFT banking information on the invoice only if required elsewhere in this contract.
- (B) If EFT banking information is not required to be on the invoice, in order for the invoice to be a proper invoice, the Contractor shall have submitted correct EFT banking information in accordance with the applicable solicitation provision (e.g., 52.232-38, Submission of Electronic Funds Transfer Information with Offer), contract clause (e.g., 52.232-33, Payment by Electronic Funds Transfer--Central Contractor Registration, or 52.232-34, Payment by Electronic Funds Transfer--Other Than Central Contractor Registration), or applicable agency procedures.
- (C) EFT banking information is not required if the Government waived the requirement to pay by EFT.
- (xi) Any other information or documentation required by the contract.
- (3) Interest penalty. The designated payment office will pay an interest penalty automatically, without request from the Contractor, if payment is not made by the due date and the conditions listed in paragraphs (a)(3)(i) through (a)(3)(iii) of this clause are met, if applicable. However, when the due date falls on a Saturday, Sunday, or legal holiday, the designated payment office may make payment on the following working day without incurring a late payment interest penalty.
- (i) The designated billing office received a proper invoice.
- (ii) The Government processed a receiving report or other Government documentation authorizing payment and there was no disagreement over quantity, quality, Contractor compliance with any contract term or condition, or requested progress payment amount.
- (iii) In the case of a final invoice for any balance of funds due the Contractor for work or services performed, the amount was not subject to further contract settlement actions between the Government and the Contractor.
- (4) Computing penalty amount. The Government will compute the interest penalty in accordance with the Office of Management and Budget prompt payment regulations at 5 CFR part 1315.
- (i) For the sole purpose of computing an interest penalty that might be due the Contractor for payments described in paragraph (a)(1)(ii) of this clause, Government acceptance or approval is deemed to occur constructively on the 7th day after the Contractor has completed the work or services in accordance with the terms and conditions of the contract. If actual acceptance or approval occurs within the constructive acceptance or approval period, the Government will base the determination of an interest penalty on the actual date of acceptance or approval. Constructive acceptance or constructive approval requirements do not apply if there is a disagreement over quantity,

quality, or Contractor compliance with a contract provision. These requirements also do not compel Government officials to accept work or services, approve Contractor estimates, perform contract administration functions, or make payment prior to fulfilling their responsibilities.

- (ii) The prompt payment regulations at 5 CFR 1315.10(c) do not require the Government to pay interest penalties if payment delays are due to disagreement between the Government and the Contractor over the payment amount or other issues involving contract compliance, or on amounts temporarily withheld or retained in accordance with the terms of the contract. The Government and the Contractor shall resolve claims involving disputes, and any interest that may be payable in accordance with the clause at FAR 52.233-1, Disputes.
- (5) Discounts for prompt payment. The designated payment office will pay an interest penalty automatically, without request from the Contractor, if the Government takes a discount for prompt payment improperly. The Government will calculate the interest penalty in accordance with the prompt payment regulations at 5 CFR part 1315.
- (6) Additional interest penalty. (i) The designated payment office will pay a penalty amount, calculated in accordance with the prompt payment regulations at 5 CFR part 1315 in addition to the interest penalty amount only if--
- (A) The Government owes an interest penalty of \$1 or more;
- (B) The designated payment office does not pay the interest penalty within 10 days after the date the invoice amount is paid; and
- (C) The Contractor makes a written demand to the designated payment office for additional penalty payment, in accordance with paragraph (a)(6)(ii) of this clause, postmarked not later than 40 days after the date the invoice amount is paid.
- (ii)(A) The Contractor shall support written demands for additional penalty payments with the following data. The Government will not request any additional data. The Contractor shall--
- (1) Specifically assert that late payment interest is due under a specific invoice, and request payment of all overdue late payment interest penalty and such additional penalty as may be required;
- (2) Attach a copy of the invoice on which the unpaid late payment interest was due; and
- (3) State that payment of the principal has been received, including the date of receipt.
- (B) If there is no postmark or the postmark is illegible--
- (1) The designated payment office that receives the demand will annotate it with the date of receipt provided the demand is received on or before the 40th day after payment was made; or
- (2) If the designated payment office fails to make the required annotation, the Government will determine the demand's validity based on the date the Contractor has placed on the demand, provided such date is no later than the 40th day after payment was made.
- (b) Contract financing payments. If this contract provides for contract financing, the Government will make contract financing payments in accordance with the applicable contract financing clause.
- (c) Subcontract clause requirements. The Contractor shall include in each subcontract for property or services (including a material supplier) for the purpose of performing this contract the following:

- (1) Prompt payment for subcontractors. A payment clause that obligates the Contractor to pay the subcontractor for satisfactory performance under its subcontract not later than 7 days from receipt of payment out of such amounts as are paid to the Contractor under this contract.
- (2) Interest for subcontractors. An interest penalty clause that obligates the Contractor to pay to the subcontractor an interest penalty for each payment not made in accordance with the payment clause--
- (i) For the period beginning on the day after the required payment date and ending on the date on which payment of the amount due is made; and
- (ii) Computed at the rate of interest established by the Secretary of the Treasury, and published in the Federal Register, for interest payments under section 12 of the Contract Disputes Act of 1978 (41 U.S.C. 611) in effect at the time the Contractor accrues the obligation to pay an interest penalty.
- (3) Subcontractor clause flowdown. A clause requiring each subcontractor to use:
- (i) Include a payment clause and an interest penalty clause conforming to the standards set forth in paragraphs (c)(1) and (c)(2) of this clause in each of its subcontracts; and
- (ii) Require each of its subcontractors to include such clauses in their subcontracts with each lower-tier subcontractor or supplier.
- (d) Subcontract clause interpretation. The clauses required by paragraph (c) of this clause shall not be construed to impair the right of the Contractor or a subcontractor at any tier to negotiate, and to include in their subcontract, provisions that--
- (1) Retainage permitted. Permit the Contractor or a subcontractor to retain (without cause) a specified percentage of each progress payment otherwise due to a subcontractor for satisfactory performance under the subcontract without incurring any obligation to pay a late payment interest penalty, in accordance with terms and conditions agreed to by the parties to the subcontract, giving such recognition as the parties deem appropriate to the ability of a subcontractor to furnish a performance bond and a payment bond;
- (2) Withholding permitted. Permit the Contractor or subcontractor to make a determination that part or all of the subcontractor's request for payment may be withheld in accordance with the subcontract agreement; and
- (3) Withholding requirements. Permit such withholding without incurring any obligation to pay a late payment penalty if--
- (i) A notice conforming to the standards of paragraph (g) of this clause previously has been furnished to the subcontractor; and
- (ii) The Contractor furnishes to the Contracting Officer a copy of any notice issued by a Contractor pursuant to paragraph (d)(3)(i) of this clause.
- (e) Subcontractor withholding procedures. If a Contractor, after making a request for payment to the Government but before making a payment to a subcontractor for the subcontractor's performance covered by the payment request, discovers that all or a portion of the payment otherwise due such subcontractor is subject to withholding from the subcontractor in accordance with the subcontract agreement, then the Contractor shall--
- (1) Subcontractor notice. Furnish to the subcontractor a notice conforming to the standards of paragraph (g) of this clause as soon as practicable upon ascertaining the cause giving rise to a withholding, but prior to the due date for subcontractor payment;

- (2) Contracting Officer notice. Furnish to the Contracting Officer, as soon as practicable, a copy of the notice furnished to the subcontractor pursuant to paragraph (e)(1) of this clause;
- (3) Subcontractor progress payment reduction. Reduce the subcontractor's progress payment by an amount not to exceed the amount specified in the notice of withholding furnished under paragraph (e)(1) of this clause;
- (4) Subsequent subcontractor payment. Pay the subcontractor as soon as practicable after the correction of the identified subcontract performance deficiency, and--
- (i) Make such payment within--
- (A) Seven days after correction of the identified subcontract performance deficiency (unless the funds therefor must be recovered from the Government because of a reduction under paragraph (e)(5)(i)) of this clause; or
- (B) Seven days after the Contractor recovers such funds from the Government; or
- (ii) Incur an obligation to pay a late payment interest penalty computed at the rate of interest established by the Secretary of the Treasury, and published in the Federal Register, for interest payments under section 12 of the Contracts Disputes Act of 1978 (41 U.S.C. 611) in effect at the time the Contractor accrues the obligation to pay an interest penalty;
- (5) Notice to Contracting Officer. Notify the Contracting Officer upon--
- (i) Reduction of the amount of any subsequent certified application for payment; or
- (ii) Payment to the subcontractor of any withheld amounts of a progress payment, specifying--
- (A) The amounts withheld under paragraph (e)(1) of this clause; and
- (B) The dates that such withholding began and ended; and
- (6) Interest to Government. Be obligated to pay to the Government an amount equal to interest on the withheld payments (computed in the manner provided in 31 U.S.C. 3903(c)(1)), from the 8th day after receipt of the withheld amounts from the Government until--
- (i) The day the identified subcontractor performance deficiency is corrected; or
- (ii) The date that any subsequent payment is reduced under paragraph (e)(5)(i) of this clause.
- (f) Third-party deficiency reports—
- (1) Withholding from subcontractor. If a Contractor, after making payment to a first-tier subcontractor, receives from a supplier or subcontractor of the first-tier subcontractor (hereafter referred to as a "second-tier subcontractor") a written notice in accordance with the Miller Act (40 U.S.C. 3133), asserting a deficiency in such first-tier subcontractor's performance under the contract for which the Contractor may be ultimately liable, and the Contractor determines that all or a portion of future payments otherwise due such first-tier subcontractor is subject to withholding in accordance with the subcontract agreement, the Contractor may, without incurring an obligation to pay an interest penalty under paragraph (e)(6) of this clause--
- (i) Furnish to the first-tier subcontractor a notice conforming to the standards of paragraph (g) of this clause as soon as practicable upon making such determination; and

- (ii) Withhold from the first-tier subcontractor's next available progress payment or payments an amount not to exceed the amount specified in the notice of withholding furnished under paragraph (f)(1)(i) of this clause.
- (2) Subsequent payment or interest charge. As soon as practicable, but not later than 7 days after receipt of satisfactory written notification that the identified subcontract performance deficiency has been corrected, the Contractor shall--
- (i) Pay the amount withheld under paragraph (f)(1)(ii) of this clause to such first-tier subcontractor; or
- (ii) Incur an obligation to pay a late payment interest penalty to such first-tier subcontractor computed at the rate of interest established by the Secretary of the Treasury, and published in the Federal Register, for interest payments under section 12 of the Contracts DisputesAct of 1978 (41 U.S.C. 611) in effect at the time the Contractor accrues the obligation to pay an interest penalty.
- (g) Written notice of subcontractor withholding. The Contractor shall issue a written notice of any withholding to a subcontractor (with a copy furnished to the Contracting Officer), specifying--
- (1) The amount to be withheld;
- (2) The specific causes for the withholding under the terms of the subcontract; and
- (3) The remedial actions to be taken by the subcontractor in order to receive payment of the amounts withheld.
- (h) Subcontractor payment entitlement. The Contractor may not request payment from the Government of any amount withheld or retained in accordance with paragraph (d) of this clause until such time as the Contractor has determined and certified to the Contracting Officer that the subcontractor is entitled to the payment of such amount.
- (i) Prime-subcontractor disputes. A dispute between the Contractor and subcontractor relating to the amount or entitlement of a subcontractor to a payment or a late payment interest penalty under a clause included in the subcontract pursuant to paragraph (c) of this clause does not constitute a dispute to which the Government is a party. The Government may not be interpleaded in any judicial or administrative proceeding involving such a dispute.
- (j) Preservation of prime-subcontractor rights. Except as provided in paragraph (i) of this clause, this clause shall not limit or impair any contractual, administrative, or judicial remedies otherwise available to the Contractor or a subcontractor in the event of a dispute involving late payment or nonpayment by the Contractor or deficient subcontract performance or nonperformance by a subcontractor.
- (k) Non-recourse for prime contractor interest penalty. The Contractor's obligation to pay an interest penalty to a subcontractor pursuant to the clauses included in a subcontract under paragraph (c) of this clause shall not be construed to be an obligation of the Government for such interest penalty. A cost-reimbursement claim may not include any amount for reimbursement of such interest penalty.
- (l) Overpayments. If the Contractor becomes aware of a duplicate contract financing or invoice payment or that the Government has otherwise overpaid on a contract financing or invoice payment, the Contractor shall immediately notify the Contracting Officer and request instructions for disposition of the overpayment.

- (a) Method of payment. (1) All payments by the Government under this contract shall be made by electronic funds transfer (EFT), except as provided in paragraph (a)(2) of this clause. As used in this clause, the term "EFT" refers to the funds transfer and may also include the payment information transfer.
- (2) In the event the Government is unable to release one or more payments by EFT, the Contractor agrees to either--
- (i) Accept payment by check or some other mutually agreeable method of payment; or
- (ii) Request the Government to extend the payment due date until such time as the Government can make payment by EFT (but see paragraph (d) of this clause).
- (b) Contractor's EFT information. The Government shall make payment to the Contractor using the EFT information contained in the Central Contractor Registration (CCR) database. In the event that the EFT information changes, the Contractor shall be responsible for providing the updated information to the CCR database.
- (c) Mechanisms for EFT payment. The Government may make payment by EFT through either the Automated Clearing House (ACH) network, subject to the rules of the National Automated Clearing House Association, or the Fedwire Transfer System. The rules governing Federal payments through the ACH are contained in 31 CFR part 210.
- (d) Suspension of payment. If the Contractor's EFT information in the CCR database is incorrect, then the Government need not make payment to the Contractor under this contract until correct EFT information is entered into the CCR database; and any invoice or contract financing request shall be deemed not to be a proper invoice for the purpose of prompt payment under this contract. The prompt payment terms of the contract regarding notice of an improper invoice and delays in accrual of interest penalties apply.
- (e) Liability for uncompleted or erroneous transfers. (1) If an uncompleted or erroneous transfer occurs because the Government used the Contractor's EFT information incorrectly, the Government remains responsible for-
- (i) Making a correct payment;
- (ii) Paying any prompt payment penalty due; and
- (iii) Recovering any erroneously directed funds.
- (2) If an uncompleted or erroneous transfer occurs because the Contractor's EFT information was incorrect, or was revised within 30 days of Government release of the EFT payment transaction instruction to the Federal Reserve System, and--
- (i) If the funds are no longer under the control of the payment office, the Government is deemed to have made payment and the Contractor is responsible for recovery of any erroneously directed funds; or
- (ii) If the funds remain under the control of the payment office, the Government shall not make payment, and the provisions of paragraph (d) of this clause shall apply.
- (f) EFT and prompt payment. A payment shall be deemed to have been made in a timely manner in accordance with the prompt payment terms of this contract if, in the EFT payment transaction instruction released to the Federal Reserve System, the date specified for settlement of the payment is on or before the prompt payment due date, provided the specified payment date is a valid date under the rules of the Federal Reserve System.
- (g) EFT and assignment of claims. If the Contractor assigns the proceeds of this contract as provided for in the assignment of claims terms of this contract, the Contractor shall require as a condition of any such assignment, that the assignee shall register separately in the CCR database and shall be paid by EFT in accordance with the terms of

this clause. Notwithstanding any other requirement of this contract, payment to an ultimate recipient other than the Contractor, or a financial institution properly recognized under an assignment of claims pursuant to subpart 32.8, is not permitted. In all respects, the requirements of this clause shall apply to the assignee as if it were the Contractor. EFT information that shows the ultimate recipient of the transfer to be other than the Contractor, in the absence of a proper assignment of claims acceptable to the Government, is incorrect EFT information within the meaning of paragraph (d) of this clause.

- (h) Liability for change of EFT information by financial agent. The Government is not liable for errors resulting from changes to EFT information made by the Contractor's financial agent.
- (i) Payment information. The payment or disbursing office shall forward to the Contractor available payment information that is suitable for transmission as of the date of release of the EFT instruction to the Federal Reserve System. The Government may request the Contractor to designate a desired format and method(s) for delivery of payment information from a list of formats and methods the payment office is capable of executing. However, the Government does not guarantee that any particular format or method of delivery is available at any particular payment office and retains the latitude to use the format and delivery method most convenient to the Government. If the Government makes payment by check in accordance with paragraph (a) of this clause, the Government shall mail the payment information to the remittance address contained in the CCR database.

(End of Clause)

52.233-1 DISPUTES. (JUL 2002)

- (a) This contract is subject to the Contract Disputes Act of 1978, as amended (41 U.S.C. 601-613).
- (b) Except as provided in the Act, all disputes arising under or relating to this contract shall be resolved under this clause.
- (c) Claim, as used in this clause, means a written demand or written assertion by one of the contracting parties seeking, as a matter of right, the payment of money in a sum certain, the adjustment or interpretation of contract terms, or other relief arising under or relating to this contract. However, a written demand or written assertion by the Contractor seeking the payment of money exceeding \$100,000 is not a claim under the Act until certified. A voucher, invoice, or other routine request for payment that is not in dispute when submitted is not a claim under the Act. The submission may be converted to a claim under the Act, by complying with the submission and certification requirements of this clause, if it is disputed either as to liability or amount or is not acted upon in a reasonable time.
- (d)(1) A claim by the Contractor shall be made in writing and, unless otherwise stated in this contract, submitted within 6 years after accrual of the claim to the Contracting Officer for a written decision. A claim by the Government against the Contractor shall be subject to a written decision by the Contracting Officer.
- (2)(i) The contractors shall provide the certification specified in subparagraph (d)(2)(iii) of this clause when submitting any claim -
- (A) Exceeding \$100,000; or
- (B) Regardless of the amount claimed, when using -
- (1) Arbitration conducted pursuant to 5 U.S.C. 575-580; or
- (2) Any other alternative means of dispute resolution (ADR) technique that the agency elects to handle in accordance with the Administrative Dispute Resolution Act (ADRA).

- (ii) The certification requirement does not apply to issues in controversy that have not been submitted as all or part of a claim.
- (iii) The certification shall state as follows: "I certify that the claim is made in good faith; that the supporting data are accurate and complete to the best of my knowledge and belief; that the amount requested accurately reflects the contract adjustment for which the Contractor believes the Government is liable; and that I am duly authorized to certify the claim on behalf of the Contractor.
- (3) The certification may be executed by any person duly authorized to bind the Contractor with respect to the claim.
- (e) For Contractor claims of \$100,000 or less, the Contracting Officer must, if requested in writing by the Contractor, render a decision within 60 days of the request. For Contractor-certified claims over \$100,000, the Contracting Officer must, within 60 days, decide the claim or notify the Contractor of the date by which the decision will be made.
- (f) The Contracting Officer's decision shall be final unless the Contractor appeals or files a suit as provided in the Act.
- (g) If the claim by the Contractor is submitted to the Contracting Officer or a claim by the Government is presented to the Contractor, the parties, by mutual consent, may agree to use alternative disput resolution (ADR). If the Contractor refuses an offer for ADR, the Contractor shall inform the Contracting Officer, in writing, of the Contractor's specific reasons for rejecting the request.
- (h) The Government shall pay interest on the amount found due and unpaid from (1) the date the Contracting Officer receives the claim (certified, if required); or (2) the date that payment otherwise would be due, if that date is later, until the date of payment. With regard to claims having defective certifications, as defined in (FAR) 48 CFR 33.201, interest shall be paid from the date that the Contracting Officer initially receives the claim. Simple interest on claims shall be paid at the rate, fixed by the Secretary of the Treasury as provided in the Act, which is applicable to the period during which the Contracting Officer receives the claim and then at the rate applicable for each 6-month period as fixed by the Treasury Secretary during the pendency of the claim.
- (i) The Contractor shall proceed diligently with performance of this contract, pending final resolution of any request for relief, claim, appeal, or action arising under the contract, and comply with any decision of the Contracting Officer.

52.233-3 PROTEST AFTER AWARD (AUG. 1996)

- (a) Upon receipt of a notice of protest (as defined in FAR 33.101) or a determination that a protest is likely (see FAR 33.102(d)), the Contracting Officer may, by written order to the Contractor, direct the Contractor to stop performance of the work called for by this contract. The order shall be specifically identified as a stop-work order issued under this clause. Upon receipt of the order, the Contractor shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the work covered by the order during the period of work stoppage. Upon receipt of the final decision in the protest, the Contracting Officer shall either--
- (1) Cancel the stop-work order; or
- (2) Terminate the work covered by the order as provided in the Default, or the Termination for Convenience of the Government, clause of this contract.

- (b) If a stop-work order issued under this clause is canceled either before or after a final decision in the protest, the Contractor shall resume work. The Contracting Officer shall make an equitable adjustment in the delivery schedule or contract price, or both, and the contract shall be modified, in writing, accordingly, if--
- (1) The stop-work order results in an increase in the time required for, or in the Contractor's cost properly allocable to, the performance of any part of this contract; and
- (2) The Contractor asserts its right to an adjustment within 30 days after the end of the period of work stoppage; provided, that if the Contracting Officer decides the facts justify the action, the Contracting Officer may receive and act upon a proposal at any time before final payment under this contract.
- (c) If a stop-work order is not canceled and the work covered by the order is terminated for the convenience of the Government, the Contracting Officer shall allow reasonable costs resulting from the stop-work order in arriving at the termination settlement.
- (d) If a stop-work order is not canceled and the work covered by the order is terminated for default, the Contracting Officer shall allow, by equitable adjustment or otherwise, reasonable costs resulting from the stop-work order.
- (e) The Government's rights to terminate this contract at any time are not affected by action taken under this clause.
- (f) If, as the result of the Contractor's intentional or negligent misstatement, misrepresentation, or miscertification, a protest related to this contract is sustained, and the Government pays costs, as provided in FAR 33.102(b)(2) or 33.104(h)(1), the Government may require the Contractor to reimburse the Government the amount of such costs. In addition to any other remedy available, and pursuant to the requirements of Subpart 32.6, the Government may collect this debt by offsetting the amount against any payment due the Contractor under any contract between the Contractor and the Government.

52.236-1 PERFORMANCE OF WORK BY THE CONTRACTOR (APR 1984)

The Contractor shall perform on the site, and with its own organization, work equivalent to at least **FIFTEEN** (15%) percent of the total amount of work to be performed under the contract. This percentage may be reduced by a supplemental agreement to this contract if, during performing the work, the Contractor requests a reduction and the Contracting Officer determines that the reduction would be to the advantage of the Government.

(End of clause)

52.236-2 DIFFERING SITE CONDITIONS (APR 1984)

As prescribed in 36.502, insert the following clause in solicitations and contracts when a fixed-price construction contract or a fixed-price dismantling, demolition, or removal of improvements contract is contemplated and the contract amount is expected to exceed the small purchase limitation. The Contracting Officer may insert the clause in solicitations and contracts when a fixed-price construction or a fixed-price contract for dismantling, demolition, or removal of improvements is contemplated and the contract amount is expected to be within the small purchase limitation.

(a) The Contractor shall promptly, and before the conditions are disturbed, give a written notice to the Contracting Officer of

- (1) subsurface or latent physical conditions at the site which differ materially from those indicated in this contract, or
- (2) unknown physical conditions at the site, of an unusual nature, which differ materially from those ordinarily encountered and generally recognized as inhering in work of the character provided for in the contract.
- (b) The Contracting Officer shall investigate the site conditions promptly after receiving the notice. If the conditions do materially so differ and cause an increase or decrease in the Contractor's cost of, or the time required for, performing any part of the work under this contract, whether or not changed as a result of the conditions, an equitable adjustment shall be made under this clause and the contract modified in writing accordingly.
- (c) No request by the Contractor for an equitable adjustment to the contract under this clause shall be allowed, unless the Contractor has given the written notice required; provided, that the time prescribed in (a) above for giving written notice may be extended by the Contracting Officer.
- (d) No request by the Contractor for an equitable adjustment to the contract for differing site conditions shall be allowed if made after final payment under this contract.

52.236-3 SITE INVESTIGATION AND CONDITIONS AFFECTING THE WORK (APR 1984)

- (a) The Contractor acknowledges that it has taken steps reasonably necessary to ascertain the nature and location of the work, and that it has investigated and satisfied itself as to the general and local conditions which can affect the work or its cost, including but not limited to
- (1) conditions bearing upon transportation, disposal, handling, and storage of materials;
- (2) the availability of labor, water, electric power, and roads;
- (3) uncertainties of weather, river stages, tides, or similar physical conditions at the site;
- (4) the conformation and conditions of the ground; and (5) the character of equipment and facilities needed preliminary to and during work performance. The Contractor also acknowledges that it has satisfied itself as to the character, quality, and quantity of surface and subsurface materials or obstacles to be encountered insofar as this information is reasonably ascertainable from an inspection of the site, including all exploratory work done by the Government, as well as from the drawings and specifications made a part of this contract. Any failure of the Contractor to take the actions described and acknowledged in this paragraph will not relieve the Contractor from responsibility for estimating properly the difficulty and cost of successfully performing the work, or for proceeding to successfully perform the work without additional expense to the Government.
- (b) The Government assumes no responsibility for any conclusions or interpretations made by the Contractor based on the information made available by the Government. Nor does the Government assume responsibility for any understanding reached or representation made concerning conditions which can affect the work by any of its officers or agents before the execution of this contract, unless that understanding or representation is expressly stated in this contract.

(End of clause)

- (a) All equipment, material, and articles incorporated into the work covered by this contract shall be new and of the most suitable grade for the purpose intended, unless otherwise specifically provided in this contract. References in the specifications to equipment, material, articles, or patented processes by trade name, make, or catalog number, shall be regarded as establishing a standard of quality and shall not be construed as limiting competition. The Contractor may, at its option, use any equipment, material, article, or process that, in the judgment of the Contracting Officer, is equal to that named in the specifications, unless otherwise specifically provided in this contract.
- (b) The Contractor shall obtain the Contracting Officer's approval of the machinery and mechanical and other equipment to be incorporated into the work. When requesting approval, the Contractor shall furnish to the Contracting Officer the name of the manufacturer, the model number, and other information concerning the performance, capacity, nature, and rating of the machinery and mechanical and other equipment. When required by this contract or by the Contracting Officer, the Contractor shall also obtain the Contracting Officer's approval of the material or articles which the Contractor contemplates incorporating into the work. When requesting approval, the Contractor shall provide full information concerning the material or articles. When directed to do so, the Contractor shall submit samples for approval at the Contractor's expense, with all shipping charges prepaid. Machinery, equipment, material, and articles that do not have the required approval shall be installed or used at the risk of subsequent rejection.
- (c) All work under this contract shall be performed in a skillful and workmanlike manner. The Contracting Officer may require, in writing, that the Contractor remove from the work any employee the Contracting Officer deems incompetent, careless, or otherwise objectionable.

52.236-6 SUPERINTENDENCE BY THE CONTRACTOR (APR 1984)

At all times during performance of this contract and until the work is completed and accepted, the Contractor shall directly superintend the work or assign and have on the worksite a competent superintendent who is satisfactory to the Contracting Officer and has authority to act for the Contractor.

(End of clause)

52.236-7 PERMITS AND RESPONSIBILITIES (NOV 1991)

The Contractor shall, without additional expense to the Government, be responsible for obtaining any necessary licenses and permits, and for complying with any Federal, State, and municipal laws, codes, and regulations applicable to the performance of the work. The Contractor shall also be responsible for all damages to persons or property that occur as a result of the Contractor's fault or negligence. The Contractor shall also be responsible for all materials delivered and work performed until completion and acceptance of the entire work, except for any completed unit of work which may have been accepted under the contract.

(End of clause)

52.236-8 OTHER CONTRACTS (APR 1984)

The Government may undertake or award other contracts for additional work at or near the site of the work under

this contract. The Contractor shall fully cooperate with the other contractors and with Government employees and shall carefully adapt scheduling and performing the work under this contract to accommodate the additional work, heeding any direction that may be provided by the Contracting Officer. The Contractor shall not commit or permit any act that will interfere with the performance of work by any other contractor or by Government employees.

(End of clause)

52.236-9 PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS (APR 1984)

- (a) The Contractor shall preserve and protect all structures, equipment, and vegetation (such as trees, shrubs, and grass) on or adjacent to the work site, which are not to be removed and which do not unreasonably interfere with the work required under this contract. The Contractor shall only remove trees when specifically authorized to do so, and shall avoid damaging vegetation that will remain in place. If any limbs or branches of trees are broken during contract performance, or by the careless operation of equipment, or by workmen, the Contractor shall trim those limbs or branches with a clean cut and paint the cut with a tree-pruning compound as directed by the Contracting Officer.
- (b) The Contractor shall protect from damage all existing improvements and utilities
- (1) at or near the work site, and
- (2) on adjacent property of a third party, the locations of which are made known to or should be known by the Contractor. The Contractor shall repair any damage to those facilities, including those that are the property of a third party, resulting from failure to comply with the requirements of this contract or failure to exercise reasonable care in performing the work. If the Contractor fails or refuses to repair the damage promptly, the Contracting Officer may have the necessary work performed and charge the cost to the Contractor.

(End of clause)

52.236-10 OPERATIONS AND STORAGE AREAS (APR 1984)

- (a) The Contractor shall confine all operations (including storage of materials) on Government premises to areas authorized or approved by the Contracting Officer. The Contractor shall hold and save the Government, its officers and agents, free and harmless from liability of any nature occasioned by the Contractor's performance.
- (b) Temporary buildings (e.g., storage sheds, shops, offices) and utilities may be erected by the Contractor only with the approval of the Contracting Officer and shall be built with labor and materials furnished by the Contractor without expense to the Government. The temporary buildings and utilities shall remain the property of the Contractor and shall be removed by the Contractor at its expense upon completion of the work. With the written consent of the Contracting Officer, the buildings and utilities may be abandoned and need not be removed.
- (c) The Contractor shall, under regulations prescribed by the Contracting Officer, use only established roadways, or use temporary roadways constructed by the Contractor when and as authorized by the Contracting Officer. When materials are transported in prosecuting the work, vehicles shall not be loaded beyond the loading capacity recommended by the manufacturer of the vehicle or prescribed by any Federal, State, or local law or regulation. When it is necessary to cross curbs or sidewalks, the Contractor shall protect them from damage. The Contractor shall repair or pay for the repair of any damaged curbs, sidewalks, or roads.

(End of clause)

52.236-11 USE AND POSSESSION PRIOR TO COMPLETION (APR 1984)

- (a) The Government shall have the right to take possession of or use any completed or partially completed part of the work. Before taking possession of or using any work, the Contracting Officer shall furnish the Contractor a list of items of work remaining to be performed or corrected on those portions of the work that the Government intends to take possession of or use. However, failure of the Contracting Officer to list any item of work shall not relieve the Contractor of responsibility for complying with the terms of the contract. The Government's possession or use shall not be deemed an acceptance of any work under the contract.
- (b) While the Government has such possession or use, the Contractor shall be relieved of the responsibility for the loss of or damage to the work resulting from the Government's possession or use, notwithstanding the terms of the clause in this contract entitled "Permits and Responsibilities." If prior possession or use by the Government delays the progress of the work or causes additional expense to the Contractor, an equitable adjustment shall be made in the contract price or the time of completion, and the contract shall be modified in writing accordingly.

(End of clause)

52.236-12 CLEANING UP (APR 1984)

The Contractor shall at all times keep the work area, including storage areas, free from accumulations of waste materials. Before completing the work, the Contractor shall remove from the work and premises any rubbish, tools, scaffolding, equipment, and materials that are not the property of the Government. Upon completing the work, the Contractor shall leave the work area in a clean, neat, and orderly condition satisfactory to the Contracting Officer.

(End of clause)

52.236-13 ACCIDENT PREVENTION (NOV 1991) – ALTERNATE I (NOV 1991)

- (a) The Contractor shall provide and maintain work environments and procedures which will
- (1) safeguard the public and Government personnel, property, materials, supplies, and equipment exposed to Contractor operations and activities;
- (2) avoid interruptions of Government operations and delays in project completion dates; and
- (3) control costs in the performance of this contract.
- (b) For these purposes on contracts for construction or dismantling, demolition, or removal of improvements, the Contractor shall-
- (1) Provide appropriate safety barricades, signs, and signal lights;
- (2) Comply with the standards issued by the Secretary of Labor at 29 CFR Part 1926 and 29 CFR Part 1910; and
- (3) Ensure that any additional measures the Contracting Officer determines to be reasonably necessary for the purposes are taken.

- (d) If this contract is for construction or dismantling, demolition or removal of improvements with any Department of Defense agency or component, the Contractor shall comply with all pertinent provisions of the latest version of U.S. Army Corps of Engineers Safety and Health Requirements Manual, EM 385-1-1, in effect on the date of the solicitation.
- (c) Whenever the Contracting Officer becomes aware of any noncompliance with these requirements or any condition which poses a serious or imminent danger to the health or safety of the public or Government personnel, the Contracting Officer shall notify the Contractor orally, with written confirmation, and request immediate initiation of corrective action. This notice, when delivered to the Contractor or the Contractor's representative at the work site, shall be deemed sufficient notice of the noncompliance and that corrective action is required. After receiving the notice, the Contractor shall immediately take corrective action. If the Contractor fails or refuses to promptly take corrective action, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. The Contractor shall not be entitled to any equitable adjustment of the contract price or extension of the performance schedule on any stop work order issued under this clause.
- (e) The Contractor shall insert this clause, including this paragraph (e), with appropriate changes in the designation of the parties, in subcontracts.
- (f) Before commencing the work, the Contractor shall-
- (1) Submit a written proposed plan for implementing this clause. The plan shall include an analysis of the significant hazards to life, limb, and property inherent in contract work performance and a plan for controlling these hazards; and
- (2) Meet with representatives of the Contracting Officer to discuss and develop a mutual understanding relative to administration of the overall safety program.

52.236-15 SCHEDULES FOR CONSTRUCTION CONTRACTS (APR 1984)

- (a) The Contractor shall, within five days after the work commences on the contract or another period of time determined by the Contracting Officer, prepare and submit to the Contracting Officer for approval three copies of a practicable schedule showing the order in which the Contractor proposes to perform the work, and the dates on which the Contractor contemplates starting and completing the several salient features of the work (including acquiring materials, plant, and equipment). The schedule shall be in the form of a progress chart of suitable scale to indicate appropriately the percentage of work scheduled for completion by any given date during the period. If the Contractor fails to submit a schedule within the time prescribed, the Contracting Officer may withhold approval of progress payments until the Contractor submits the required schedule.
- (b) The Contractor shall enter the actual progress on the chart as directed by the Contracting Officer, and upon doing so shall immediately deliver three copies of the annotated schedule to the Contracting Officer. If, in the opinion of the Contracting Officer, the Contractor falls behind the approved schedule, the Contractor shall take steps necessary to improve its progress, including those that may be required by the Contracting Officer, without additional cost to the Government. In this circumstance, the Contracting Officer may require the Contractor to increase the number of shifts, overtime operations, days of work, and/or the amount of construction plant, and to submit for approval any supplementary schedule or schedules in chart form as the Contracting Officer deems necessary to demonstrate how the approved rate of progress will be regained.
- (c) Failure of the Contractor to comply with the requirements of the Contracting Officer under this clause shall be grounds for a determination by the Contracting Officer that the Contractor is not prosecuting the work with sufficient diligence to ensure completion within the time specified in the contract. Upon making this determination,

the Contracting Officer may terminate the Contractor's right to proceed with the work, or any separable part of it, in accordance with the default terms of this contract.

(End of clause)

52.236-17 LAYOUT OF WORK (APR 1984)

The Contractor shall lay out its work from Government established base lines and bench marks indicated on the drawings, and shall be responsible for all measurements in connection with the layout. The Contractor shall furnish, at its own expense, all stakes, templates, platforms, equipment, tools, materials, and labor required to lay out any part of the work. The Contractor shall be responsible for executing the work to the lines and grades that may be established or indicated by the Contracting Officer. The Contractor shall also be responsible for maintaining and preserving all stakes and other marks established by the Contracting Officer until authorized to remove them. If such marks are destroyed by the Contractor or through its negligence before their removal is authorized, the Contracting Officer may replace them and deduct the expense of the replacement from any amounts due or to become due to the Contractor.

(End of clause)

52.236-21 SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION (FEB 1997) - ALTERNATE I (APR 1984

- (a) The Contractor shall keep on the work site a copy of the drawings and specifications and shall at all times give the Contracting Officer access thereto. Anything mentioned in the specifications and not shown on the drawings, or shown on the drawings and not mentioned in the specifications, shall be of like effect as if shown or mentioned in both. In case of difference between drawings and specifications, the specifications shall govern. In case of discrepancy in the figures, in the drawings, or in the specifications, the matter shall be promptly submitted to the Contracting Officer, who shall promptly make a determination in writing. Any adjustment by the Contractor without such a determination shall be at its own risk and expense. The Contracting Officer shall furnish from time to time such detailed drawings and other information as considered necessary, unless otherwise provided.
- (b) Wherever in the specifications or upon the drawings the words "directed", "required", "ordered", "designated", "prescribed", or words of like import are used, it shall be understood that the "direction", "requirement", "order", "designation", or "prescription", of the Contracting Officer is intended and similarly the words "approved", "acceptable", "satisfactory", or words of like import shall mean "approved by," or "acceptable to", or "satisfactory to" the Contracting Officer, unless otherwise expressly stated.
- (c) Where "as shown," as indicated", "as detailed", or words of similar import are used, it shall be understood that the reference is made to the drawings accompanying this contract unless stated otherwise. The word "provided" as used herein shall be understood to mean "provide complete in place," that is "furnished and installed".
- (d) Shop drawings means drawings, submitted to the Government by the Contractor, subcontractor, or any lower tier subcontractor pursuant to a construction contract, showing in detail (1) the proposed fabrication and assembly of structural elements, and (2) the installation (i.e., fit, and attachment details) of materials or equipment. It includes drawings, diagrams, layouts, schematics, descriptive literature, illustrations, schedules, performance and test data, and similar materials furnished by the contractor to explain in detail specific portions of the work required by the contract. The Government may duplicate, use, and disclose in any manner and for any purpose shop drawings delivered under this contract.
- (e) If this contract requires shop drawings, the Contractor shall coordinate all such drawings, and review them for

accuracy, completeness, and compliance with contract requirements and shall indicate its approval thereon as evidence of such coordination and review. Shop drawings submitted to the Contracting Officer without evidence of the Contractor's approval may be returned for resubmission. The Contracting Officer will indicate an approval or disapproval of the shop drawings and if not approved as submitted shall indicate the Government's reasons therefor. Any work done before such approval shall be at the Contractor's risk. Approval by the Contracting Officer shall not relieve the Contractor from responsibility for any errors or omissions in such drawings, nor from responsibility for complying with the requirements of this contract, except with respect to variations described and approved in accordance with (f) below.

- (f) If shop drawings show variations from the contract requirements, the Contractor shall describe such variations in writing, separate from the drawings, at the time of submission. If the Contracting Officer approves any such variation, the Contracting Officer shall issue an appropriate contract modification, except that, if the variation is minor or does not involve a change in price or in time of performance, a modification need not be issued.
- (g) The Contractor shall submit to the Contracting Officer for approval four copies (unless otherwise indicated) of all shop drawings as called for under the various headings of these specifications. Three sets (unless otherwise indicated) of all shop drawings, will be retained by the Contracting Officer and one set will be returned to the Contractor. Upon completing the work under this contract, the Contractor shall furnish a complete set of all shop drawings as finally approved. These drawings shall show all changes and revisions made up to the time the equipment is completed and accepted.

(End of clause)

52.236-23 RESPONSIBILITY OF THE ARCHITECT-ENGINEER CONTRACTOR (APR 1984)

- (a) The Contractor shall be responsible for the professional quality, technical accuracy, and the coordination of all designs, drawings, specifications, and other services furnished by the Contractor under this contract. The Contractor shall, without additional compensation, correct or revise any errors or deficiencies in its designs, drawings, specifications, and other services.
- (b) Neither the Government's review, approval or acceptance of, nor payment for, the services required under this contract shall be construed to operate as a waiver of any rights under this contract or of any cause of action arising out of the performance of this contract, and the Contractor shall be and remain liable to the Government in accordance with applicable law for all damages to the Government caused by the Contractor's negligent performance of any of the services furnished under this contract.
- (c) The rights and remedies of the Government provided for under this contract are in addition to any other rights and remedies provided by law.
- (d) If the Contractor is comprised of more than one legal entity, each such entity shall be jointly and severally liable hereunder.

(End of clause)

52.236-24 WORK OVERSIGHT IN ARCHITECT-ENGINEER CONTRACTS (APR 1984)

The extent and character of the work to be done by the Contractor shall be subject to the general oversight, supervision, direction, control, and approval of the Contracting Officer.

(End of clause)

52.236-25 REQUIREMENTS FOR REGISTRATION OF DESIGNERS (JUN 2003)

Architects or engineers registered to practice in the particular professional field involved in a State, the District of Columbia, or an outlying area of the United States shall prepare or review and approve the design of architectural, structural, mechanical, electrical, civil, or other engineering features of the work.

(End of clause)

52.236-26 PRECONSTRUCTION CONFERENCE (FEB 1995)

If the Contracting Officer decides to conduct a preconstruction conference, the successful offeror will be notified and will be required to attend. The Contracting Officer's notification will include specific details regarding the date, time, and location of the conference, any need for attendance by subcontractors, and information regarding the items to be discussed.

(End of clause)

52.242-13 BANKRUPTCY (JUL 1995)

In the event the Contractor enters into proceedings relating to bankruptcy, whether voluntary or involuntary, the Contractor agrees to furnish, by certified mail or electronic commerce method authorized by the contract, written notification of the bankruptcy to the Contracting Officer responsible for administering the contract. This notification shall be furnished within five days of the initiation of the proceedings relating to bankruptcy filing. This notification shall include the date on which the bankruptcy petition was filed, the identity of the court in which the bankruptcy petition was filed, and a listing of Government contract numbers and contracting offices for all Government contracts against which final payment has not been made. This obligation remains in effect until final payment under this contract.

(End of clause)

52.242-14 SUSPENSION OF WORK (APR 1984)

- (a) The Contracting Officer may order the Contractor, in writing, to suspend, delay, or interrupt all or any part of the work of this contract for the period of time that the Contracting Officer determines appropriate for the convenience of the Government.
- (b) If the performance of all or any part of the work is, for an unreasonable period of time, suspended, delayed, or interrupted (1) by an act of the Contracting Officer in the administration of this contract, or (2) by the Contracting Officer's failure to act within the time specified in this contract (or within a reasonable time if not specified), an adjustment shall be made for any increase in the cost of performance of this contract (excluding profit) necessarily caused by the unreasonable suspension, delay, or interruption, and the contract modified in writing accordingly. However, no adjustment shall be made under this clause for any suspension, delay, or interruption to the extent that performance would have been so suspended, delayed, or interrupted by any other cause, including the fault or negligence of the Contractor, or for which an equitable adjustment is provided for or excluded under any other term or condition of this contract. (c) A claim under this clause shall not be allowed (1) for any costs incurred more than 20 days before the Contractor shall have notified the Contracting Officer in writing of the act or failure to act

involved (but this requirement shall not apply as to a claim resulting from a suspension order), and (2) unless the claim, in an amount stated, is asserted in writing as soon as practicable after the termination of the suspension, delay, or interruption, but not later than the date of final payment under the contract.

(End of clause)

52.243-4 CHANGES (AUG 1987)

- (a) The Contracting Officer may, at any time, without notice to the sureties, if any, by written order designated or indicated to be a change order, make changes in the work within the general scope of the contract, including changes--
- (1) In the specifications (including drawings and designs);
- (2) In the method or manner of performance of the work;
- (3) In the Government-furnished facilities, equipment, materials, services, or site; or
- (4) Directing acceleration in the performance of the work.
- (b) Any other written or oral order (which, as used in this paragraph (b), includes direction, instruction, interpretation, or determination) from the Contracting Officer that causes a change shall be treated as a change order under this clause; provided, that the Contractor gives the Contracting Officer written notice stating
- (1) the date, circumstances, and source of the order and
- (2) that the Contractor regards the order as a change order.
- (c) Except as provided in this clause, no order, statement, or conduct of the Contracting Officer shall be treated as a change under this clause or entitle the Contractor to an equitable adjustment.
- (d) If any change under this clause causes an increase or decrease in the Contractor's cost of, or the time required for, the performance of any part of the work under this contract, whether or not changed by any such order, the Contracting Officer shall make an equitable adjustment and modify the contract in writing. However, except for an adjustment based on defective specifications, no adjustment for any change under paragraph (b) of this clause shall be made for any costs incurred more than 20 days before the Contractor gives written notice as required. In the case of defective specifications for which the Government is responsible, the equitable adjustment shall include any increased cost reasonably incurred by the Contractor in attempting to comply with the defective specifications.
- (e) The Contractor must assert its right to an adjustment under this clause within 30 days after
- (1) receipt of a written change order under paragraph (a) of this clause or (2) the furnishing of a written notice under paragraph (b) of this clause, by submitting to the Contracting Officer a written statement describing the general nature and amount of the proposal, unless this period is extended by the Government. The statement of proposal for adjustment may be included in the notice under paragraph (b) above.
- (f) No proposal by the Contractor for an equitable adjustment shall be allowed if asserted after final payment under this contract.

(End of clause)

52.243-6 CHANGE ORDER ACCOUNTING (APR 1984)

The Contracting Officer may require change order accounting whenever the estimated cost of a change or series of related changes exceeds \$100,000. The Contractor, for each change or series of related changes, shall maintain separate accounts, by job order or other suitable accounting procedure, of all incurred segregable, direct costs (less allocable credits) of work, both changed and not changed, allocable to the change. The Contractor shall maintain such accounts until the parties agree to an equitable adjustment for the changes ordered by the Contracting Officer or the matter is conclusively disposed of in accordance with the Disputes clause.

(End of clause)

52.244-4 SUBCONTRACTORS AND OUTSIDE ASSOCIATES AND CONSULTANTS (ARCHITECT-ENGINEER SERVICES) (AUG 1998)

Any subcontractors and outside associates or consultants required by the Contractor in connection with the services covered by the contract will be limited to individuals or firms that were specifically identified and agreed to during negotiations. The Contractor shall obtain the Contracting Officer's written consent before making any substitution for these subcontractors, associates, or consultants.

(End of clause)

52.244-5 COMPETITION IN SUBCONTRACTING (DEC 1996)

- (a) The Contractor shall select subcontractors (including suppliers) on a competitive basis to the maximum practical extent consistent with the objectives and requirements of the contract.
- (b) If the Contractor is an approved mentor under the Department of Defense Pilot Mentor-Protege Program (Pub. L. 101–510, section 831 as amended), the Contractor may award subcontracts under this contract on a noncompetitive basis to its proteges.

(End of clause)

52.244-6 SUBCONTRACTS FOR COMMERCIAL ITEMS (FEB 2006)

(a) Definitions.

"Commercial item", has the meaning contained in Federal Acquistion Regulation 2.101, Definitions.

"Subcontract", includes a transfer of commercial items between divisions, subsidiaries, or affiliates of the Contractor or subcontractor at any tier.

- (b) To the maximum extent practicable, the Contractor shall incorporate, and require its subcontractors at all tiers to incorporate, commercial items or nondevelopmental items as components of items to be supplied under this contract.
- (c) (1) The Contractor shall insert the following clauses in subcontracts for commercial items:

- (i) 52.219-8, Utilization of Small Business Concerns (MAY 2004) (15 U.S.C. 637(d)(2) and (3)), in all subcontracts that offer further subcontracting opportunities. If the subcontract (except subcontracts to small business concerns) exceeds \$500,000 (\$1,000,000 for construction of any public facility), the subcontractor must include 52.219-8 in lower tier subcontracts that offer subcontracting opportunities.
- (ii) 52.222-26, Equal Opportunity (Apr 2002) (E.O. 11246).
- (iii) 52.222-35, Equal Opportunity for Special Disabled Veterans, Veterans of the Vietnam Era and Other Eligible Veterans (DEC 2001) (38 U.S.C. 4212(a)).
- (iv) 52.222-36, Affirmative Action for Workers with Disabilities (JUN 1998) (29 U.S.C. 793).
- (v) 52.222-39, Notification of Employee Rights Concerning Payment of Union Dues or Fees (DEC 2004) (E.O. 13201). Flow down as required in accordance with paragraph (g) of FAR clause 52.222-39).
- (vi) 52.247-64, Preference for Privately Owned U.S.-Flag Commercial Vessels (FEB 2006) (46 U.S.C. Appx 1241 and 10 U.S.C. 2631) (flow down required in accordance with paragraph (d) of FAR clause 52.247-64).
- (2) While not required, the Contractor may flow down to subcontracts for commercial items a minimal number of additional clauses necessary to satisfy its contractual obligations.
- (d) The Contractor shall include the terms of this clause, including this paragraph (d), in subcontracts awarded under this contract.

52.246-1 CONTRACTOR INSPECTION REQUIREMENTS (APR 1984)

The Contractor is responsible for performing or having performed all inspections and tests necessary to substantiate that the supplies or services furnished under this contract conform to contract requirements, including any applicable technical requirements for specified manufacturers' parts. This clause takes precedence over any Government inspection and testing required in the contract's specifications, except for specialized inspections or tests specified to be performed solely by the Government.

(End of clause)

52.246-12 INSPECTION OF CONSTRUCTION (AUG 1996)

- (a) Definition. "Work" includes, but is not limited to, materials, workmanship, and manufacture and fabrication of components.
- (b) The Contractor shall maintain an adequate inspection system and perform such inspections as will ensure that the work performed under the contract conforms to contract requirements. The Contractor shall maintain complete inspection records and make them available to the Government. All work shall be conducted under the general direction of the Contracting Officer and is subject to Government inspection and test at all places and at all reasonable times before acceptance to ensure strict compliance with the terms of the contract.
- (c) Government inspections and tests are for the sole benefit of the Government and do not--
- (1) Relieve the Contractor of responsibility for providing adequate quality control measures;

- (2) Relieve the Contractor of responsibility for damage to or loss of the material before acceptance;
- (3) Constitute or imply acceptance; or
- (4) Affect the continuing rights of the Government after acceptance of the completed work under paragraph (i) of this section.
- (d) The presence or absence of a Government inspector does not relieve the Contractor from any contract requirement, nor is the inspector authorized to change any term or condition of the specification without the Contracting Officer's written authorization.
- (e) The Contractor shall promptly furnish, at no increase in contract price, all facilities, labor, and material reasonably needed for performing such safe and convenient inspections and tests as may be required by the Contracting Officer. The Government may charge to the Contractor any additional cost of inspection or test when work is not ready at the time specified by the Contractor for inspection or test, or when prior rejection makes reinspection or retest necessary. The Government shall perform all inspections and tests in a manner that will not unnecessarily delay the work. Special, full size, and performance tests shall be performed as described in the contract.
- (f) The Contractor shall, without charge, replace or correct work found by the Government not to conform to contract requirements, unless in the public interest the Government consents to accept the work with an appropriate adjustment in contract price. The Contractor shall promptly segregate and remove rejected material from the premises.
- (g) If the Contractor does not promptly replace or correct rejected work, the Government may (1) by contract or otherwise, replace or correct the work and charge the cost to the Contractor or (2) terminate for default the Contractor's right to proceed.
- (h) If, before acceptance of the entire work, the Government decides to examine already completed work by removing it or tearing it out, the Contractor, on request, shall promptly furnish all necessary facilities, labor, and material. If the work is found to be defective or nonconforming in any material respect due to the fault of the Contractor or its subcontractors, the Contractor shall defray the expenses of the examination and of satisfactory reconstruction. However, if the work is found to meet contract requirements, the Contracting Officer shall make an equitable adjustment for the additional services involved in the examination and reconstruction, including, if completion of the work was thereby delayed, an extension of time.
- (i) Unless otherwise specified in the contract, the Government shall accept, as promptly as practicable after completion and inspection, all work required by the contract or that portion of the work the Contracting Officer determines can be accepted separately. Acceptance shall be final and conclusive except for latent defects, fraud, gross mistakes amounting to fraud, or the Government's rights under any warranty or guarantee.

52.247-34 F.O.B. DESTINATION (NOV 1991)

- (a) The term "f.o.b. destination," as used in this clause, means--
- (1) Free of expense to the Government, on board the carrier's conveyance, at a specified delivery point where the consignee's facility (plant, warehouse, store, lot, or other location to which shipment can be made) is located; and

- (2) Supplies shall be delivered to the destination consignee's wharf (if destination is a port city and supplies are for export), warehouse unloading platform, or receiving dock, at the expense of the Contractor. The Government shall not be liable for any delivery, storage, demurrage, accessorial, or other charges involved before the actual delivery (or "constructive placement" as defined in carrier tariffs) of the supplies to the destination, unless such charges are caused by an act or order of the Government acting in its contractual capacity. If rail carrier is used, supplies shall be delivered to the specified unloading platform of the consignee. If motor carrier (including "piggyback") is used, supplies shall be delivered to truck tailgate at the unloading platform of the consignee, except when the supplies delivered meet the requirements of Item 568 of the National Motor Freight Classification for "heavy or bulky freight." When supplies meeting the requirements of the referenced Item 568 are delivered, unloading (including movement to the tailgate) shall be performed by the consignee, with assistance from the truck driver, if requested. If the contractor uses rail carrier or freight forwarded for less than carload shipments, the contractor shall ensure that the carrier will furnish tailgate delivery, when required, if transfer to truck is required to complete delivery to consignee.
- (b) The Contractor shall--
- (1)(i) Pack and mark the shipment to comply with contract specifications; or
- (ii) In the absence of specifications, prepare the shipment in conformance with carrier requirements;
- (2) Prepare and distribute commercial bills of lading;
- (3) Deliver the shipment in good order and condition to the point of delivery specified in the contract;
- (4) Be responsible for any loss of and/or damage to the goods occurring before receipt of the shipment by the consignee at the delivery point specified in the contract;
- (5) Furnish a delivery schedule and designate the mode of delivering carrier; and
- (6) Pay and bear all charges to the specified point of delivery.

52.247-63 PREFERENCE FOR U.S.-FLAG AIR CARRIERS (JUN 2003)

(a) Definitions. As used in this clause--

International air transportation means transportation by air between a place in the United States and a place outside the United States or between two places both of which are outside the United States.

United States means the 50 States, the District of Columbia, and outlying areas.

- U.S.-flag air carrier means an air carrier holding a certificate under 49 U.S.C. Chapter 411.
- (b) Section 5 of the International Air Transportation Fair Competitive Practices Act of 1974 (49 U.S.C. 40118) (Fly America Act) requires that all Federal agencies and Government contractors and subcontractors use U.S.-flag air carriers for U.S. Government-financed international air transportation of personnel (and their personal effects) or property, to the extent that service by those carriers is available. It requires the Comptroller General of the United States, in the absence of satisfactory proof of the necessity for foreign-flag air transportation, to disallow expenditures from funds, appropriated or otherwise established for the account of the United States, for international air transportation secured aboard a foreign-flag air carrier if a U.S.-flag air carrier is available to provide such services.

- (c) If available, the Contractor, in performing work under this contract, shall use U.S.-flag carriers for international air transportation of personnel (and their personal effects) or property.
- (d) In the event that the Contractor selects a carrier other than a U.S.-flag air carrier for international air transportation, the Contractor shall include a statement on vouchers involving such transportation essentially as follows:

STATEMENT OF UNAVAILABILITY OF U.S.-FLAG AIR CARRIERS

International air transportation of persons (and their personal effects) or property by U.Sflag air carrier was not
available or it was necessary to use foreign-flag air carrier service for the following reasons (see section 47.403 of
the Federal Acquisition Regulation): [State reasons]:

(End of statement)

(e) The Contractor shall include the substance of this clause, including this paragraph (e), in each subcontract or purchase under this contract that may involve international air transportation.

(End of clause)

52.248-3 VALUE ENGINEERING--CONSTRUCTION (FEB 2000)

- (a) General. The Contractor is encouraged to develop, prepare, and submit value engineering change proposals (VECP's) voluntarily. The Contractor shall share in any instant contract savings realized from accepted VECP's, in accordance with paragraph (f) below.
- (b) Definitions. "Collateral costs," as used in this clause, means agency costs of operation, maintenance, logistic support, or Government-furnished property.
- "Collateral savings," as used in this clause, means those measurable net reductions resulting from a VECP in the agency's overall projected collateral costs, exclusive of acquisition savings, whether or not the acquisition cost changes.
- "Contractor's development and implementation costs," as used in this clause, means those costs the Contractor incurs on a VECP specifically in developing, testing, preparing, and submitting the VECP, as well as those costs the Contractor incurs to make the contractual changes required by Government acceptance of a VECP.
- "Government costs," as used in this clause, means those agency costs that result directly from developing and implementing the VECP, such as any net increases in the cost of testing, operations, maintenance, and logistic support. The term does not include the normal administrative costs of processing the VECP.
- "Instant contract savings," as used in this clause, means the estimated reduction in Contractor cost of performance resulting from acceptance of the VECP, minus allowable Contractor's development and implementation costs, including subcontractors' development and implementation costs (see paragraph (h) below).
- "Value engineering change proposal (VECP)" means a proposal that--
- (1) Requires a change to this, the instant contract, to implement; and
- (2) Results in reducing the contract price or estimated cost without impairing essential functions or characteristics; provided, that it does not involve a change--

- (i) In deliverable end item quantities only; or
- (ii) To the contract type only.
- (c) VECP preparation. As a minimum, the Contractor shall include in each VECP the information described in subparagraphs (1) through (7) below. If the proposed change is affected by contractually required configuration management or similar procedures, the instructions in those procedures relating to format, identification, and priority assignment shall govern VECP preparation. The VECP shall include the following:
- (1) A description of the difference between the existing contract requirement and that proposed, the comparative advantages and disadvantages of each, a justification when an item's function or characteristics are being altered, and the effect of the change on the end item's performance.
- (2) A list and analysis of the contract requirements that must be changed if the VECP is accepted, including any suggested specification revisions.
- (3) A separate, detailed cost estimate for
- (i) the affected portions of the existing contract requirement and
- (ii) the VECP. The cost reduction associated with the VECP shall take into account the Contractor's allowable development and implementation costs, including any amount attributable to subcontracts under paragraph (h) below.
- (4) A description and estimate of costs the Government may incur in implementing the VECP, such as test and evaluation and operating and support costs.
- (5) A prediction of any effects the proposed change would have on collateral costs to the agency.
- (6) A statement of the time by which a contract modification accepting the VECP must be issued in order to achieve the maximum cost reduction, noting any effect on the contract completion time or delivery schedule.
- (7) Identification of any previous submissions of the VECP, including the dates submitted, the agencies and contract numbers involved, and previous Government actions, if known.
- (d) Submission. The Contractor shall submit VECP's to the Resident Engineer at the worksite, with a copy to the Contracting Officer.
- (e) Government action.
- (1) The Contracting Officer will notify the Contractor of the status of the VECP within 45 calendar days after the contracting office receives it. If additional time is required, the Contracting Officer will notify the Contractor within the 45-day period and provide the reason for the delay and the expected date of the decision. The Government will process VECP's expeditiously; however, it shall not be liable for any delay in acting upon a VECP.

If the VECP is not accepted, the Contracting Officer will notify the Contractor in writing, explaining the reasons for rejection. The Contractor may withdraw any VECP, in whole or in part, at any time before it is accepted by the Government. The Contracting Officer may require that the Contractor provide written notification before undertaking significant expenditures for VECP effort.

Any VECP may be accepted, in whole or in part, by the Contracting Officer's award of a modification to this contract citing this clause. The Contracting Officer may accept the VECP, even though an agreement on price reduction has not been reached, by issuing the Contractor a notice to proceed with the change. Until a notice to

proceed is issued or a contract modification applies a VECP to this contract, the Contractor shall perform in accordance with the existing contract. The decision to accept or reject all or part of any VECP is a unilateral decision made solely at the discretion of the Contracting Officer.

- (f) Sharing.
- (1) Rates. The Government's share of savings is determined by subtracting Government costs from instant contract savings and multiplying the result by
- (i) 45 percent for fixed-price contracts or
- (ii) 75 percent for cost-reimbursement contracts.
- (2) Payment. Payment of any share due the Contractor for use of a VECP on this contract shall be authorized by a modification to this contract to--
- (i) Accept the VECP;
- (ii) Reduce the contract price or estimated cost by the amount of instant contract savings; and
- (iii) Provide the Contractor's share of savings by adding the amount calculated to the contract price or fee.
- (g) Collateral savings. If a VECP is accepted, the Contracting Officer will increase the instant contract amount by 20 percent of any projected collateral savings determined to be realized in a typical year of use after subtracting any Government costs not previously offset. However, the Contractor's share of collateral savings will not exceed the contract's firm-fixed-price or estimated cost, at the time the VECP is accepted, or \$100,000, whichever is greater. The Contracting Officer is the sole determiner of the amount of collateral savings.
- (h) Subcontracts. The Contractor shall include an appropriate value engineering clause in any subcontract of \$50,000 or more and may include one in subcontracts of lesser value. In computing any adjustment in this contract's price under paragraph (f) above, the Contractor's allowable development and implementation costs shall include any subcontractor's allowable development and implementation costs clearly resulting from a VECP accepted by the Government under this contract, but shall exclude any value engineering incentive payments to a subcontractor. The Contractor may choose any arrangement for subcontractor value engineering incentive payments; provided, that these payments shall not reduce the Government's share of the savings resulting from the VECP.
- (i) Data. The Contractor may restrict the Government's right to use any part of a VECP or the supporting data by marking the following legend on the affected parts:

"These data, furnished under the Value Engineering-- Construction clause of contract , shall not be disclosed outside the Government or duplicated, used, or disclosed, in whole or in part, for any purpose other than to evaluate a value engineering change proposal submitted under the clause. This restriction does not limit the Government's right to use information contained in these data if it has been obtained or is otherwise available from the Contractor or from another source without limitations." If a VECP is accepted, the Contractor hereby grants the Government unlimited rights in the VECP and supporting data, except that, with respect to data qualifying and submitted as limited rights technical data, the Government shall have the rights specified in the contract modification implementing the VECP and shall appropriately mark the data. (The terms "unlimited rights" and "limited rights" are defined in Part 27 of the Federal Acquisition Regulation.)

(End of clause)

ALTERNATE I (SEP 1996)

- (a) The Government may terminate performance of work under this contract in whole or, from time to time, in part if the Contracting Officer determines that a termination is in the Government's interest. The Contracting Officer shall terminate by delivering to the Contractor a Notice of Termination specifying the extent of termination and the effective date.
- (b) After receipt of a Notice of Termination, and except as directed by the Contracting Officer, the Contractor shall immediately proceed with the following obligations, regardless of any delay in determining or adjusting any amounts due under this clause:
- (1) Stop work as specified in the notice.
- (2) Place no further subcontracts or orders (referred to as subcontracts in this clause) for materials, services, or facilities, except as necessary to complete the continued portion of the contract.
- (3) Terminate all subcontracts to the extent they relate to the work terminated.
- (4) Assign to the Government, as directed by the Contracting Officer, all right, title, and interest of the Contractor under the subcontracts terminated, in which case the Government shall have the right to settle or to pay any termination settlement proposal arising out of those terminations.
- (5) With approval or ratification to the extent required by the Contracting Officer, settle all outstanding liabilities and termination settlement proposals arising from the termination of subcontracts; the approval or ratification will be final for purposes of this clause.
- (6) As directed by the Contracting Officer, transfer title and deliver to the Government (i) the fabricated or unfabricated parts, work in process, completed work, supplies, and other material produced or acquired for the work terminated, and (ii) the completed or partially completed plans, drawings, information, and other property that, if the contract had been completed, would be required to be furnished to the Government.
- (7) Complete performance of the work not terminated.
- (8) Take any action that may be necessary, or that the Contracting Officer may direct, for the protection and preservation of the property related to this contract that is in the possession of the Contractor and in which the Government has or may acquire an interest.
- (9) Use its best efforts to sell, as directed or authorized by the Contracting Officer, any property of the types referred to in subparagraph (b)(6) of this clause; provided, however, that the Contractor (i) is not required to extend credit to any purchaser and (ii) may acquire the property under the conditions prescribed by, and at prices approved by, the Contracting Officer. The proceeds of any transfer or disposition will be applied to reduce any payments to be made by the Government under this contract, credited to the price or cost of the work, or paid in any other manner directed by the Contracting Officer.
- (c) The Contractor shall submit complete termination inventory schedules no later than 120 days from the effective date of termination, unless extended in writing by the Contracting Officer upon written request of the Contractor within this 120-day period.
- (d) After expiration of the plant clearance period as defined in Subpart 49.001 of the Federal Acquisition Regulation, the Contractor may submit to the Contracting Officer a list, certified as to quantity and quality, of termination inventory not previously disposed of, excluding items authorized for disposition by the Contracting Officer. The Contractor may request the Government to remove those items or enter into an agreement for their storage. Within 15 days, the Government will accept title to those items and remove them or enter into a storage

agreement. The Contracting Officer may verify the list upon removal of the items, or if stored, within 45 days from submission of the list, and shall correct the list, as necessary, before final settlement.

- (e) After termination, the Contractor shall submit a final termination settlement proposal to the Contracting Officer in the form and with the certification prescribed by the Contracting Officer. The Contractor shall submit the proposal promptly, but no later than 1 year from the effective date of termination, unless extended in writing by the Contracting Officer upon written request of the Contractor within this 1-year period. However, if the Contracting Officer determines that the facts justify it, a termination settlement proposal may be received and acted on after 1 year or any extension. If the Contractor fails to submit the proposal within the time allowed, the Contracting Officer may determine, on the basis of information available, the amount, if any, due the Contractor because of the termination and shall pay the amount determined.
- (f) Subject to paragraph (e) of this clause, the Contractor and the Contracting Officer may agree upon the whole or any part of the amount to be paid or remaining to be paid because of the termination. The amount may include a reasonable allowance for profit on work done. However, the agreed amount, whether under this paragraph (g) or paragraph (g) of this clause, exclusive of costs shown in subparagraph (g)(3) of this clause, may not exceed the total contract price as reduced by (1) the amount of payments previously made and (2) the contract price of work not terminated. The contract shall be modified, and the Contractor paid the agreed amount. Paragraph (g) of this clause shall not limit, restrict, or affect the amount that may be agreed upon to be paid under this paragraph.
- (g) If the Contractor and Contracting Officer fail to agree on the whole amount to be paid the Contractor because of the termination of work, the Contracting Officer shall pay the Contractor the amounts determined as follows, but without duplication of any amounts agreed upon under paragraph (f) of this clause:
- (1) For contract work performed before the effective date of termination, the total (without duplication of any items) of--
- (i) The cost of this work;
- (ii) The cost of settling and paying termination settlement proposals under terminated subcontracts that are properly chargeable to the terminated portion of the contract if not included in subdivision (g)(1)(i) of this clause; and
- (iii) A sum, as profit on subdivision (g)(1)(i) of this clause, determined by the Contracting Officer under 49.202 of the Federal Acquisition Regulation, in effect on the date of this contract, to be fair and reasonable; however, if it appears that the Contractor would have sustained a loss on the entire contract had it been completed, the Contracting Officer shall allow no profit under this subdivision (iii) and shall reduce the settlement to reflect the indicated rate of loss.
- (2) The reasonable costs of settlement of the work terminated, including--
- (i) Accounting, legal, clerical, and other expenses reasonably necessary for the preparation of termination settlement proposals and supporting data;
- (ii) The termination and settlement of subcontracts (excluding the amounts of such settlements); and
- (iii) Storage, transportation, and other costs incurred, reasonably necessary for the preservation, protection, or disposition of the termination inventory.
- (h) Except for normal spoilage, and except to the extent that the Government expressly assumed the risk of loss, the Contracting Officer shall exclude from the amounts payable to the Contractor under paragraph (g) of this clause, the fair value, as determined by the Contracting Officer, of property that is destroyed, lost, stolen, or damaged so as to become undeliverable to the Government or to a buyer.

- (i) The cost principles and procedures of Part 31 of the Federal Acquisition Regulation, in effect on the date of this contract, shall govern all costs claimed, agreed to, or determined under this clause.
- (j) The Contractor shall have the right of appeal, under the Disputes clause, from any determination made by the Contracting Officer under paragraph (e), (g), or (l) of this clause, except that if the Contractor failed to submit the termination settlement proposal or request for equitable adjustment within the time provided in paragraph (e) or (l), respectively, and failed to request a time extension, there is no right of appeal.
- (k) In arriving at the amount due the Contractor under this clause, there shall be deducted-
- (1) All unliquidated advance or other payments to the Contractor under the terminated portion of this contract;
- (2) Any claim which the Government has against the Contractor under this contract; and
- (3) The agreed price for, or the proceeds of sale of, materials, supplies, or other things acquired by the Contractor or sold under the provisions of this clause and not recovered by or credited to the Government.
- (l) If the termination is partial, the Contractor may file a proposal with the Contracting Officer for an equitable adjustment of the price(s) of the continued portion of the contract. The Contracting Officer shall make any equitable adjustment agreed upon. Any proposal by the Contractor for an equitable adjustment under this clause shall be requested within 90 days from the effective date of termination unless extended in writing by the Contracting Officer.
- (m)(1) The Government may, under the terms and conditions it prescribes, make partial payments and payments against costs incurred by the Contractor for the terminated portion of the contract, if the Contracting Officer believes the total of these payments will not exceed the amount to which the Contractor will be entitled.
- (2) If the total payments exceed the amount finally determined to be due, the Contractor shall repay the excess to the Government upon demand, together with interest computed at the rate established by the Secretary of the Treasury under 50 U.S.C. App. 1215(b)(2). Interest shall be computed for the period from the date the excess payment is received by the Contractor to the date the excess is repaid. Interest shall not be charged on any excess payment due to a reduction in the Contractor's termination settlement proposal because of retention or other disposition of termination inventory until 10 days after the date of the retention or disposition, or a later date determined by the Contracting Officer because of the circumstances.
- (n) Unless otherwise provided in this contract or by statute, the Contractor shall maintain all records and documents relating to the terminated portion of this contract for 3 years after final settlement. This includes all books and other evidence bearing on the Contractor's costs and expenses under this contract. The Contractor shall make these records and documents available to the Government, at the Contractor's office, at all reasonable times, without any direct charge. If approved by the Contracting Officer, photographs, microphotographs, or other authentic reproductions may be maintained instead of original records and documents.

52.249-10 DEFAULT (FIXED-PRICE CONSTRUCTION) (APR 1984)

(a) If the Contractor refuses or fails to prosecute the work or any separable part, with the diligence that will insure its completion within the time specified in this contract including any extension, or fails to complete the work within this time, the Government may, by written notice to the Contractor, terminate the right to proceed with the work (or the separable part of the work) that has been delayed. In this event, the Government may take over the work and complete it by contract or otherwise, and may take possession of and use any materials, appliances, and plant on the work site necessary for completing the work. The Contractor and its sureties shall be liable for any damage to the

Government resulting from the Contractor's refusal or failure to complete the work within the specified time, whether or not the Contractor's right to proceed with the work is terminated. This liability includes any increased costs incurred by the Government in completing the work.

- (b) The Contractor's right to proceed shall not be terminated nor the Contractor charged with damages under this clause, if--
- (1) The delay in completing the work arises from unforeseeable causes beyond the control and without the fault or negligence of the Contractor. Examples of such causes include
- (i) acts of God or of the public enemy,
- (ii) acts of the Government in either its sovereign or contractual capacity,
- (iii) acts of another Contractor in the performance of a contract with the Government,
- (iv) fires,
- (v) floods,
- (vi) epidemics,
- (vii) quarantine restrictions,
- (viii) strikes,
- (ix) freight embargoes,
- (x) unusually severe weather, or delays of subcontractors or suppliers at any tier arising from unforeseeable causes beyond the control and without the fault or negligence of both the Contractor and the subcontractors or suppliers; and
- (2) The Contractor, within 10 days from the beginning of any delay (unless extended by the Contracting Officer), notifies the Contracting Officer in writing of the causes of delay. The Contracting Officer shall ascertain the facts and the extent of delay. If, in the judgment of the Contracting Officer, the findings of fact warrant such action, the time for completing the work shall be extended. The findings of the Contracting Officer shall be final and conclusive on the parties, but subject to appeal under the Disputes clause.
- (c) If, after termination of the Contractor's right to proceed, it is determined that the Contractor was not in default, or that the delay was excusable, the rights and obligations of the parties will be the same as if the termination had been issued for the convenience of the Government.

The rights and remedies of the Government in this clause are in addition to any other rights and remedies provided by law or under this contract.

(End of clause)

52.252-6 AUTHORIZED DEVIATIONS IN CLAUSES (APR 1984)

(a) The use in this solicitation or contract of any Federal Acquisition Regulation (48 CFR Chapter 1) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the date of the clause.

(b) The use in this solicitation or contract of any **<u>Defense FAR Supplement</u>** (48 CFR <u>2</u>) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the name of the regulation.

(End of clause)

52.253-1 COMPUTER GENERATED FORMS (JAN 1991)

- (a) Any data required to be submitted on a Standard or Optional Form prescribed by the Federal Acquisition Regulation (FAR) may be submitted on a computer generated version of the form, provided there is no change to the name, content, or sequence of the data elements on the form, and provided the form carries the Standard or Optional Form number and edition date.
- (b) Unless prohibited by agency regulations, any data required to be submitted on an agency unique form prescribed by an agency supplement to the FAR may be submitted on a computer generated version of the form provided there is no change to the name, content, or sequence of the data elements on the form and provided the form carries the agency form number and edition date.
- (e) If the Contractor submits a computer generated version of a form that is different than the required form, then the rights and obligations of the parties will be determined based on the content of the required form.

(End of clause)

252.201-7000 CONTRACTING OFFICER'S REPRESENTATIVE (DEC 1991)

- (a) "Definition. Contracting officer's representative" means an individual designated in accordance with subsection 201.602-2 of the Defense Federal Acquisition Regulation Supplement and authorized in writing by the contracting officer to perform specific technical or administrative functions.
- (b) If the Contracting Officer designates a contracting officer's representative (COR), the Contractor will receive a copy of the written designation. It will specify the extent of the COR's authority to act on behalf of the contracting officer. The COR is not authorized to make any commitments or changes that will affect price, quality, quantity, delivery, or any other term or condition of the contract.

(End of clause)

252.203-7001 PROHIBITION ON PERSONS CONVICTED OF FRAUD OR OTHER DEFENSE-CONTRACT-RELATED FELONIES (DEC 2004)

- (a) Definitions. As used in this clause—
- (1) "Arising out of a contract with the DoD" means any act in connection with—
- (i) Attempting to obtain;
- (ii) Obtaining, or
- (iii) Performing a contract or first-tier subcontract of any agency, department, or component of the Department of Defense (DoD).

- (2) "Conviction of fraud or any other felony" means any conviction for fraud or a felony in violation of state or Federal criminal statutes, whether entered on a verdict or plea, including a plea of nolo contendere, for which sentence has been imposed.
- (3) "Date of conviction" means the date judgment was entered against the individual.
- (b) Any individual who is convicted after September 29, 1988, of fraud or any other felony arising out of a contract with the DoD is prohibited from serving--
- (1) In a management or supervisory capacity on this contract;
- (2) On the board of directors of the Contractor;
- (3) As a consultant, agent, or representative for the Contractor; or
- (4) In any other capacity with the authority to influence, advise, or control the decisions of the Contractor with regard to this contract.
- (c) Unless waived, the prohibition in paragraph (b) of this clause applies for not less than 5 years from the date of conviction.
- (d) 10 U.S.C. 2408 provides that the Contractor shall be subject to a criminal penalty of not more than \$500,000 if convicted of knowingly--
- (1) Employing a person under a prohibition specified in paragraph (b) of this clause; or
- (2) Allowing such a person to serve on the board of directors of the contractor or first-tier subcontractor.
- (e) In addition to the criminal penalties contained in 10 U.S.C. 2408, the Government may consider other available remedies, such as—
- (1) Suspension or debarment;
- (2) Cancellation of the contract at no cost to the Government; or
- (3) Termination of the contract for default.
- (f) The Contractor may submit written requests for waiver of the prohibition in paragraph (b) of this clause to the Contracting Officer. Requests shall clearly identify—
- (1) The person involved;
- (2) The nature of the conviction and resultant sentence or punishment imposed;
- (3) The reasons for the requested waiver; and
- (4) An explanation of why a waiver is in the interest of national security.
- (g) The Contractor agrees to include the substance of this clause, appropriately modified to reflect the identity and relationship of the parties, in all first-tier subcontracts exceeding the simplified acquisition threshold in Part 2 of the Federal Acquisition Regulation, except those for commercial items or components.

(h) Pursuant to 10 U.S.C. 2408(c), defense contractors and subcontractors may obtain information as to whether a particular person has been convicted of fraud or any other felony arising out of a contract with the DoD by contacting The Office of Justice Programs, The Denial of Federal Benefits Office, U.S. Department of Justice, telephone (301) 809-4904.

(End of clause)

252.204-7000 DISCLOSURE OF INFORMATION (DEC 1991)

- (a) The Contractor shall not release to anyone outside the Contractor's organization any unclassified information, regardless of medium (e.g., film, tape, document), pertaining to any part of this contract or any program related to this contract, unless--
- (1) The Contracting Officer has given prior written approval; or
- (2) The information is otherwise in the public domain before the date of release.
- (b) Requests for approval shall identify the specific information to be released, the medium to be used, and the purpose for the release. The Contractor shall submit its request to the Contracting Officer at least 45 days before the proposed date for release.
- (c) The Contractor agrees to include a similar requirement in each subcontract under this contract. Subcontractors shall submit requests for authorization to release through the prime contractor to the Contracting Officer.

(End of clause)

252.204-7003 CONTROL OF GOVERNMENT PERSONNEL WORK PRODUCT (APR 1992)

The Contractor's procedures for protecting against unauthorized disclosure of information shall not require Department of Defense employees or members of the Armed Forces to relinquish control of their work products, whether classified or not, to the contractor.

(End of clause)

252.209-7004 SUBCONTRACTING WITH FIRMS THAT ARE OWNED OR CONTROLLED BY THE GOVERNMENT OF A TERRORIST COUNTRY (MAR 1998)

- (a) Unless the Government determines that there is a compelling reason to do so, the Contractor shall not enter into any subcontract in excess of \$25,000 with a firm, or subsidiary of a firm, that is identified, on the List of Parties Excluded from Federal Procurement and Nonprocurement Programs, as being ineligible for the award of Defense contracts or subcontracts because it is owned or controlled by the government of a terrorist country.
- (b) A corporate officer or a designee of the Contractor shall notify the Contracting Officer, in writing, before entering into a subcontract with a party that is identified, on the List of Parties Excluded from Federal Procurement and Nonprocurement Programs, as being ineligible for the award of Defense contracts or subcontracts because it is owned or controlled by the government of a terrorist country. The notice must include the name of the proposed subcontractor notwithstanding its inclusion on the List of Parties Excluded From Federal Procurement and Nonprocurement Programs.

252.215-7000 PRICING ADJUSTMENTS (DEC 1991)

The term "pricing adjustment," as used in paragraph (a) of the clauses entitled "Price Reduction for Defective Cost or Pricing Data - Modifications," "Subcontractor Cost or Pricing Data," and "Subcontractor Cost or Pricing Data - Modifications," means the aggregate increases and/or decreases in cost plus applicable profits.

(End of clause)

252.215-7002 COST ESTIMATING SYSTEM REQUIREMENTS (OCT 1998)

(a) "Definition."

"Estimating system" means the Contractor's policies, procedures, and practices for generating estimates of costs and other data included in proposals submitted to customers in the expectation of receiving contract awards. Estimating system includes the Contractor's --

- (1) Organizational structure;
- (2) Established lines of authority, duties, and responsibilities;
- (3) Internal controls and managerial reviews;
- (4) Flow of work, coordination, and communication; and
- (5) Estimating methods, techniques, accumulation of historical costs, and other analyses used to generate cost estimates.1997
- (b) "General."
- (1) The Contractor shall establish, maintain, and comply with an estimating system that is consistently applied and produces reliable, verifiable, supportable, and documented cost estimates that are an acceptable basis for negotiation of fair and reasonable prices.
- (2) The system should be --
- (i) Consistent and integrated with the Contractor's related management systems; and
- (ii) Subject to applicable financial control systems.
- (c) "Applicability". Paragraphs (d) and (e) of this clause apply if the Contractor is a large business and either --
- (1) In its fiscal year preceding award of this contract, received Department of Defense (DoD) prime contracts or subcontracts, totaling \$50 million or more for which certified cost or pricing data were required; or
- (2) In its fiscal year preceding award of this contract --

- (i) Received DoD prime contracts or subcontracts totaling \$10 million or more (but less than \$50 million) for which certified cost or pricing data were required; and
- (ii) Was notified in writing by the Contracting Officer that paragraphs (d) and (e) of this clause apply.
- (d) "System requirements."
- (1) The Contractor shall disclose its estimating system to the Administrative Contracting Officer (ACO) in writing. If the Contractor wishes the Government to protect the information as privileged or confidential, the Contractor must mark the documents with the appropriate legends before submission.
- (2) An estimating system disclosure is adequate when the Contractor has provided the ACO with documentation that--
- (i) Accurately describes those policies, procedures, and practices that the Contractor currently uses in preparing cost proposals; and
- (ii) Provides sufficient detail for the Government to reasonably make an informed judgment regarding the acceptability of the Contractor's estimating practices.
- (3) The Contractor shall --
- (i) Comply with its disclosed estimating system; and
- (ii) Disclose significant changes to the cost estimating system to the ACO on a timely basis.
- (e) "Estimating system deficiencies."
- (1) The Contractor shall respond to a written report from the Government that identifies deficiencies in the Contractor's estimating system as follows:
- (i) If the Contractor agrees with the report findings and recommendations, the Contractor shall --
- (A) Within 30 days, state its agreement in writing; and
- (B) Within 60 days, correct the deficiencies or submit a corrective action plan showing proposed milestones and actions leading to elimination of the deficiencies.
- (ii) If the Contractor disagrees with the report, the Contractor shall, within 30 days, state its rationale for disagreeing.
- (2) The ACO will evaluate the Contractor's response and notify the Contractor of the determination concerning remaining deficiencies and/or the adequacy of any proposed or completed corrective action.

252.222-7002 COMPLIANCE WITH LOCAL LABOR LAWS (OVERSEAS) (JUN 1997)

- (a) The Contractor shall comply with all—
- (1) Local laws, regulations, and labor union agreements governing work hours; and

- (2) Labor regulations including collective bargaining agreements, workers' compensation, working conditions, fringe benefits, and labor standards or labor contract matters.
- (b) The Contractor indemnifies and holds harmless the United States Government from all claims arising out of the requirements of this clause. This indemnity includes the Contractor's obligation to handle and settle, without cost to the United States Government, any claims or litigation concerning allegations that the Contractor or the United States Government, or both, have not fully complied with local labor laws or regulations relating to the performance of work required by this contract.
- (c) Notwithstanding paragraph (b) of this clause, consistent with paragraphs 31.205-15(a) and 31.205-47(d) of the Federal Acquisition Regulation, the Contractor will be reimbursed for the costs of all fines, penalties, and reasonable litigation expenses incurred as a result of compliance with specific contract terms and conditions or written instructions from the Contracting officer.

252.223-7004 DRUG-FREE WORK FORCE (SEP 1988)

- (a) Definitions.
- (1) "Employee in a sensitive position," as used in this clause, means an employee who has been granted access to classified information; or employees in other positions that the Contractor determines involve national security; health or safety, or functions other than the foregoing requiring a high degree of trust and confidence.
- (2) "Illegal drugs," as used in this clause, means controlled substances included in Schedules I and II, as defined by section 802(6) of title 21 of the United States Code, the possession of which is unlawful under chapter 13 of that Title. The term "illegal drugs" does not mean the use of a controlled substance pursuant to a valid prescription or other uses authorized by law.
- (b) The Contractor agrees to institute and maintain a program for achieving the objective of a drug-free work force. While this clause defines criteria for such a program, contractors are encouraged to implement alternative approaches comparable to the criteria in paragraph (c) that are designed to achieve the objectives of this clause.
- (c) Contractor programs shall include the following, or appropriate alternatives:
- (1) Employee assistance programs emphasizing high level direction, education, counseling, rehabilitation, and coordination with available community resources;
- (2) Supervisory training to assist in identifying and addressing illegal drug use by Contractor employees;
- (3) Provision for self-referrals as well as supervisory referrals to treatment with maximum respect for individual confidentiality consistent with safety and security issues;
- (4) Provision for identifying illegal drug users, including testing on a controlled and carefully monitored basis. Employee drug testing programs shall be established taking account of the following:
- (i) The Contractor shall establish a program that provides for testing for the use of illegal drugs by employees in sensitive positions. The extent of and criteria for such testing shall be determined by the Contractor based on considerations that include the nature of the work being performed under the contract, the employee's duties, and efficient use of Contractor resources, and the risks to health, safety, or national security that could result from the failure of an employee adequately to discharge his or her position.

- (ii) In addition, the Contractor may establish a program for employee drug testing--
- (A) When there is a reasonable suspicion that an employee uses illegal drugs; or
- (B) When an employees has been involved in an accident or unsafe practice;
- (C) As part of or as a follow-up to counseling or rehabilitation for illegal drug use;
- (D) As part of a voluntary employee drug testing program.
- (iii) The Contractor may establish a program to test applicants for employment for illegal drug use.
- (iv) For the purpose of administering this clause, testing for illegal drugs may be limited to those substances for which testing is prescribed by section 2..1 of subpart B of the "Mandatory Guidelines for Federal Workplace Drug Testing Programs" (53 FR 11980 (April 11, 1988), issued by the Department of Health and Human Services.
- (d) Contractors shall adopt appropriate personnel procedures to deal with employees who are found to be using drugs illegally. Contractors shall not allow any employee to remain on duty or perform in a sensitive position who is found to use illegal drugs until such times as the Contractor, in accordance with procedures established by the Contractor, determines that the employee may perform in such a position.
- (e) The provisions of this clause pertaining to drug testing program shall not apply to the extent that are inconsistent with state or local law, or with an existing collective bargaining agreement; provided that with respect to the latter, the Contractor agrees those issues that are in conflict will be a subject of negotiation at the next collective bargaining session.

252.223-7006 PROHIBITION ON STORAGE AND DISPOSAL OF TOXIC AND HAZARDOUS MATERIALS (APR 1993)

(a) "Definitions".

As used in this clause --

- (1) "Storage" means a non-transitory, semi-permanent or permanent holding, placement, or leaving of material. It does not include a temporary accumulation of a limited quantity of a material used in or a waste generated or resulting from authorized activities, such as servicing, maintenance, or repair of Department of Defense (DoD) items, equipment, or facilities.
- (2) "Toxic or hazardous materials" means:
- (i) Materials referred to in section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 (42 U.S.C. 9601(14)) and materials designated under section 102 of CERCLA (42 U.S.C. 9602) (40 CFR part 302);
- (ii) Materials that are of an explosive, flammable, or pyrotechnic nature; or
- (iii) Materials otherwise identified by the Secretary of Defense as specified in DoD regulations.
- (b) In accordance with 10 U.S.C. 2692, the Contractor is prohibited from storing or disposing of non-DoD-owned toxic or hazardous materials on a DoD installation, except to the extent authorized by a statutory exception to 10 U.S.C. 2692 or as authorized by the Secretary of Defense or his designee.

252.225-7005 IDENTIFICATION OF EXPENDITURES IN THE UNITED STATES (JUN 2005)

- (a) Definition. United States, as used in this clause, means the 50 States, the District of Columbia, and outlying areas.
- (b) This clause applies only if the Contractor is-
- (1) A concern incorporated in the United States (including a subsidiary that is incorporated in the United States, even if the parent corporation is not incorporated in the United States); or
- (2) An unincorporated concern having its principal place of business in the United States.
- (c) On each invoice, voucher, or other request for payment under this contract, the Contractor shall identify that part of the requested payment that represents estimated expenditures in the United States. The identification--
- (1) May be expressed either as dollar amounts or as percentages of the total amount of the request for payment;
- (2) Should be based on reasonable estimates; and
- (3) Shall state the full amount of the payment requested, subdivided into the following categories:
- (i) U.S. products--expenditures for material and equipment manufactured or produced in the United States, including end products, components, or construction material, but excluding transportation;
- (ii) U.S. services--expenditures for services performed in the United States, including all charges for overhead, other indirect costs, and profit under construction or service contracts;
- (iii) Transportation on U.S. carriers--expenditures for transportation furnished by U.S. flag, ocean, surface, and air carriers; and
- (iv) Expenditures not identified under paragraphs (c)(3)(i) through (iii) of this clause.
- (d) Nothing in this clause requires the establishment or maintenance of detailed accounting records or gives the U.S. Government any right to audit the Contractor's books or records.

(End of clause)

252.225-7012 Preference for Certain Domestic Commodities (JUN 2004)

- (a) Definitions. As used in this clause--
- (1) Component means any item supplied to the Government as part of an end product or of another component.
- (2) End product means supplies delivered under a line item of this contract.
- (3) United States means the 50 States, the District of Columbia, and outlying areas.

- (4) U.S.-flag vessel means a vessel of the United States or belonging to the United States, including any vessel registered or having national status under the laws of the United States.
- (b) The Contractor shall deliver under this contract only such of the following items, either as end products or components, that have been grown, reprocessed, reused, or produced in the United States:
- (1) Food.
- (2) Clothing.
- (3) Tents, tarpaulins, or covers.
- (4) Cotton and other natural fiber products.
- (5) Woven silk or woven silk blends.
- (6) Spun silk yarn for cartridge cloth.
- (7) Synthetic fabric, and coated synthetic fabric, including all textile fibers and yarns that are for use in such fabrics.
- (8) Canvas products.
- (9) Wool (whether in the form of fiber or yarn or contained in fabrics, materials, or manufactured articles).
- (10) Any item of individual equipment (Federal Supply Class 8465) manufactured from or containing fibers, yarns, fabrics, or materials listed in this paragraph (b).
- (c) This clause does not apply--
- (1) To items listed in section 25.104(a) of the Federal Acquisition Regulation (FAR), or other items for which the Government has determined that a satisfactory quality and sufficient quantity cannot be acquired as and when needed at U.S. market prices;
- (2) To end products incidentally incorporating cotton, other natural fibers, or wool, for which the estimated value of the cotton, other natural fibers, or wool--
- (i) Is not more than 10 percent of the total price of the end product; and (ii) Does not exceed the simplified acquisition threshold in FAR part 2;
- (3) To waste and byproducts of cotton or wool fiber for use in the production of propellants and explosives;
- (4) To foods, other than fish, shellfish, or seafood, that have been manufactured or processed in the United States, regardless of where the foods (and any component if applicable) were grown or produced. Fish, shellfish, or seafood manufactured or processed in the United States and fish, shellfish, or seafood contained in foods manufactured or processed in the United States shall be provided in accordance with paragraph (d) of this clause;
- (5) To chemical warfare protective clothing produced in the countries listed in subsection 225.872-1 of the Defense FAR Supplement; or
- (6) To fibers and yarns that are for use in synthetic fabric or coated synthetic fabric (but does apply to the synthetic or coated synthetic fabric itself), if--

- (i) The fabric is to be used as a component of an end product that is not a textile product. Examples of textile products, made in whole or in part of fabric, include--
- (A) Draperies, floor coverings, furnishings, and bedding (Federal Supply Group 72, Household and Commercial Furnishings and Appliances);
- (B) Items made in whole or in part of fabric in Federal Supply Group 83, Textile/leather/furs/apparel/findings/tents/flags, or Federal Supply Group 84, Clothing, Individual Equipment and Insignia;
- (C) Upholstered seats (whether for household, office, or other use); and
- (D) Parachutes (Federal Supply Class 1670); or
- (ii) The fibers and yarns are para-aramid fibers and yarns manufactured in the Netherlands.
- (d)(1) Fish, shellfish, and seafood delivered under this contract, or contained in foods delivered under this contract-
- (i) Shall be taken from the sea by U.S.-flag vessels; or
- (ii) If not taken from the sea, shall be obtained from fishing within the United States; and
- (2) Any processing or manufacturing of the fish, shellfish, or seafood shall be performed on a U.S.-flag vessel or in the United States.

252.225-7031 SECONDARY ARAB BOYCOTT OF ISRAEL (JUN 2005)

- (a) Definitions. As used in this provision--
- (1) Foreign person means any person (including any individual, partnership, corporation, or other form of association) other than a United States person.
- (2) United States means the 50 States, the District of Columbia, outlying areas, and the outer Continental Shelf as defined in 43 U.S.C. 1331.
- (3) United States person is defined in 50 U.S.C. App. 2415(2) and means--
- (i) Any United States resident or national (other than an individual resident outside the United States who is employed by other than a United States person);
- (ii) Any domestic concern (including any permanent domestic establishment of any foreign concern); and
- (iii) Any foreign subsidiary or affiliate (including any permanent foreign establishment) of any domestic concern that is controlled in fact by such domestic concern.
- (b) Certification. If the offeror is a foreign person, the offeror certifies, by submission of an offer, that it-
- (1) Does not comply with the Secondary Arab Boycott of Israel; and
- (2) Is not taking or knowingly agreeing to take any action, with respect to the Secondary Boycott of Israel by Arab countries, which 50 U.S.C. App. 2407(a) prohibits a United States person from taking.

(End of provision)

252.225-7041 CORRESPONDENCE IN ENGLISH (JUNE 1997)

The Contractor shall ensure that all contract correspondence that is addressed to the United States Government is submitted in English or with an English translation.

(End of clause)

252.225-7043 ANTITERRORISM/FORCE PROTECTION POLICY FOR DEFENSE CONTRACTORS OUTSIDE THE UNITED STATES (MAR 2006)

- (a) Definition. United States, as used in this clause, means, the 50 States, the District of Columbia, and outlying areas.
- (b) Except as provided in paragraph (c) of this clause, the Contractor and its subcontractors, if performing or traveling outside the United States under this contract, shall--
- (1) Affiliate with the Overseas Security Advisory Council, if the Contractor or subcontractor is a U.S. entity;
- (2) Ensure that Contractor and subcontractor personnel who are U.S. nationals and are in-country on a non-transitory basis, register with the U.S. Embassy, and that Contractor and subcontractor personnel who are third country nationals comply with any security related requirements of the Embassy of their nationality;
- (3) Provide, to Contractor and subcontractor personnel, antiterrorism/force protection awareness information commensurate with that which the Department of Defense (DoD) provides to its military and civilian personnel and their families, to the extent such information can be made available prior to travel outside the United States; and
- (4) Obtain and comply with the most current antiterrorism/force protection guidance for Contractor and subcontractor personnel.
- (c) The requirements of this clause do not apply to any subcontractor that is-
- (1) A foreign government;
- (2) A representative of a foreign government; or
- (3) A foreign corporation wholly owned by a foreign government.
- (d) Information and guidance pertaining to DoD antiterrorism/force protection can be obtained from Combined Forces Command, Afghanistan, (CFC-A), Base Defense Operations Center (BDOC) Camp Eggers, Kabul, Afghanistan.

(End of clause)

252.225-7044 BALANCE OF PAYMENTS PROGRAM--CONSTRUCTION MATERIAL (JUN 2005)

(a) Definitions. As used in this clause "Component" means any article, material, or supply incorporated directly into construction material.

"Construction material" means an article, material, or supply brought to the construction site by the Contractor or a subcontractor for incorporation into the building or work. The term also includes an item brought to the site preassembled from articles, materials, or supplies. However, emergency life safety systems, such as emergency lighting, fire alarm, and audio evacuation systems, that are discrete systems incorporated into a public building or work and that are produced as complete systems, are evaluated as a single and distinct construction material regardless of when or how the individual parts or components of those systems are delivered to the construction site. Materials purchased directly by the Government are supplies, not construction material.

"Cost of components" means--

- (1) For components purchased by the Contractor, the acquisition cost, including transportation costs to the place of incorporation into the end product (whether or not such costs are paid to a domestic firm), and any applicable duty (whether or not a duty-free entry certificate is issued); or
- (2) For components manufactured by the Contractor, all costs associated with the manufacture of the component, including transportation costs as described in paragraph (1) of this definition, plus allocable overhead costs, but excluding profit. Cost of components does not include any costs associated with the manufacture of the construction material.

"Domestic construction material" means--

- (1) An unmanufactured construction material mined or produced in the United States; or
- (2) A construction material manufactured in the United States, if the cost of its components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. Components of foreign origin of the same class or kind for which nonavailability determinations have been made are treated as domestic. "United States" means the 50 States and the District of Columbia, U.S. territories and possessions, Puerto Rico, the Northern Mariana Islands, and any other place subject to U.S. jurisdiction, but does not include leased bases.
- "United States" means the 50 States, the District of Columbia, and outlying areas.
- (b) Domestic preference. This clause implements the Balance of Payments Program by providing a preference for domestic construction material. The Contractor shall use only domestic construction material in performing this contract, except for—
- (1) Construction material valued at or below the simplified acquisition threshold in part 2 of the Federal Acquisition Regulation; or
- (2) The construction material or components listed by the Government as follows:

NONE.

(End of clause)

252.227-7002 READJUSTMENT OF PAYMENTS (OCT 1966)

- (a) If any license, under substantially the same patents and authorizing substantially the same acts which are authorized under this contract, has been or shall hereafter be granted within the United States, on royalty terms which are more favorable to the licensee than those contained herein, the Government shall be entitled to the benefit of such more favorable terms with respect to all royalties accruing under this contract after the date such more favorable terms become effective, and the Contractor shall promptly notify the Secretary in writing of the granting of such more favorable terms.
- (b) In the event any claim of any patent hereby licensed is construed or held invalid by decision of a court of competent jurisdiction, the requirement to pay royalties under this contract insofar as its arises solely by reason of such claim, and any other claim not materially different therefrom, shall be interpreted in conformity with the court's decision as to the scope of validity of such claims; provided, however, that in the event such decision is modified or reversed on appeal, the requirement to pay royalties under this contract shall be interpreted in conformity with the final decision rendered on such appeal.

252.227-7022 GOVERNMENT RIGHTS (UNLIMITED) (MAR 1979)

The Government shall have unlimited rights, in all drawings, designs, specifications, notes and other works developed in the performance of this contract, including the right to use same on any other Government design or construction without additional compensation to the Contractor. The Contractor hereby grants to the Government a paid-up license throughout the world to all such works to which he may assert or establish any claim under design patent or copyright laws. The Contractor for a period of three (3) years after completion of the project agrees to furnish the original or copies of all such works on the request of the Contracting Officer.

(End of clause)

252.227-7023 DRAWINGS AND OTHER DATA TO BECOME PROPERTY OF GOVERNMENT. (MAR 1979)

All designs, drawings, specifications, notes and other works developed in the performance of this contract shall become the sole property of the Government and may be used on any other design or construction without additional compensation to the Contractor. The Government shall be considered the "person for whom the work was prepared" for the purpose of authorship in any copyrightable work under 17 U.S.C. 201(b). With respect thereto, the Contractor agrees not to assert or authorize others to assert any rights nor establish any claim under the design patent or copyright laws. The Contractor for a period of three (3) years after completion of the project agrees to furnish all retained works on the request of the Contracting Officer. Unless otherwise provided in this contract, the Contractor shall have the right to retain copies of all works beyond such period.

(End of clause)

252.227-7030 TECHNICAL DATA--WITHHOLDING OF PAYMENT (MAR 2000)

(a) If technical data specified to be delivered under this contract, is not delivered within the time specified by this contract or is deficient upon delivery (including having restrictive markings not identified in the list described in the clause at 252.227-7013(e)(2) or 252.227-7018(e)(2) of this contract), the Contracting Officer may until such data is accepted by the Government, withhold payment to the Contractor of ten percent (10%) of the total contract price or amount unless a lesser withholding is specified in the contract. Payments shall not be withheld nor any other action

taken pursuant to this paragraph when the Contractor's failure to make timely delivery or to deliver such data without deficiencies arises out of causes beyond the control and without the fault or negligence of the Contractor.

(b) The withholding of any amount or subsequent payment to the Contractor shall not be construed as a waiver of any rights accruing to the Government under this contract.

(End of clause)

252.227-7033 RIGHTS IN SHOP DRAWINGS (APR 1966)

- (a) Shop drawings for construction means drawings, submitted to the Government by the Construction Contractor, subcontractor or any lower-tier subcontractor pursuant to a construction contract, showing in detail (i) the proposed fabrication and assembly of structural elements and (ii) the installation (i.e., form, fit, and attachment details) of materials or equipment. The Government may duplicate, use, and disclose in any manner and for any purpose shop drawings delivered under this contract.
- (b) This clause, including this paragraph (b), shall be included in all subcontracts hereunder at any tier.

252.231-7000 SUPPLEMENTAL COST PRINCIPLES (DEC 1991)

When the allowability of costs under this contract is determined in accordance with part 31 of the Federal Acquisition Regulation (FAR), allowability shall also be determined in accordance with part 231 of the Defense FAR Supplement, in effect on the date of this contract.

(End of clause)

252.232-7008 ASSIGNMENT OF CLAIMS (OVERSEAS) (JUNE 1997)

- (a) No claims for monies due, or to become due, shall be assigned by the Contractor unless—
- (1) Approved in writing by the Contracting Officer;
- (2) Made in accordance with the laws and regulations of the United States of America; and
- (3) Permitted by the laws and regulations of the Contractor's country.
- (b) In no event shall copies of this contract of any plans, specifications, or other similar documents relating to work under this contract, if marked "Top Secret," "Secret," or "Confidential" be furnished to any assignee of any claim arising under this contract or to any other person not entitled to receive such documents. However, a copy of any part or all of this contract so marked may be furnished, or any information contained herein may be disclosed, to such assignee upon the Contracting Officer's prior written authorization.
- (c) Any assignment under this contract shall cover all amounts payable under this contract and not already paid, and shall not be made to more than one party, except that any such assignment may be made to one party as agent or trustee for two or more parties participating in such financing. On each invoice or voucher submitted for payment under this contract to which any assignment applies, and for which direct payment thereof is to be made to an assignee, the Contractor shall—
- (1) Identify the assignee by name and complete address; and

(2) Acknowledge the validity of the assignment and the right of the named assignee to receive payment in the amount invoiced or vouchered.

(End of clause)

252.233-7001 CHOICE OF LAW (OVERSEAS) (JUNE 1997)

This contract shall be construed and interpreted in accordance with the substantive laws of the United States of America. By the execution of this contract, the Contractor expressly agrees to waive any rights to invoke the jurisdiction of local national courts where this contract is performed and agrees to accept the exclusive jurisdiction of the United States Armed Services Board of Contract Appeals and the United States Court of Federal Claims for hearing and determination of any and all disputes that may arise under the Disputes clause of this contract.

(End of clause)

252.236-7000 MODIFICATION PROPOSALS - PRICE BREAKDOWN. (DEC 1991)

- (a) The Contractor shall furnish a price breakdown, itemized as required and within the time specified by the Contracting Officer, with any proposal for a contract modification.
- (b) The price breakdown --
- (1) Must include sufficient detail to permit an analysis of profit, and of all costs for --
- (i) Material;
- (ii) Labor;
- (iii) Equipment;
- (iv) Subcontracts; and
- (v) Overhead; and
- (2) Must cover all work involved in the modification, whether the work was deleted, added, or changed.
- (c) The Contractor shall provide similar price breakdowns to support any amounts claimed for subcontracts.
- (d) The Contractor's proposal shall include a justification for any time extension proposed.

252.236-7006 COST LIMITATION (JAN 1997)

- (a)Certain items in this solicitation are subject to statutory cost limitations. The limitations are stated in the Schedule.
- (b)An offer which does not state separate prices for the items identified in the Schedule as subject to a cost limitation may be considered nonresponsive.
- (c)Prices stated in offers for items subject to cost limitations shall include an appropriate apportionment of all costs, direct and indirect, overhead, and profit.

- (d) Offers may be rejected which--
- (1) Are materially unbalanced for the purpose of bringing items within cost limitations; or
- (2) Exceed the cost limitations, unless the limitations have been waived by the Government prior to award.

(End of provision)

252.243-7001 PRICING OF CONTRACT MODIFICATIONS (DEC 1991)

When costs are a factor in any price adjustment under this contract, the contract cost principles and procedures in FAR part 31 and DFARS part 231, in effect on the date of this contract, apply.

252.243-7002 REQUESTS FOR EQUITABLE ADJUSTMENT (MAR 1998)

- (a) The amount of any request for equitable adjustment to contract terms shall accurately reflect the contract adjustment for which the Contractor believes the Government is liable. The request shall include only costs for performing the change, and shall not include any costs that already have been reimbursed or that have been separately claimed. All indirect costs included in the request shall be properly allocable to the change in accordance with applicable acquisition regulations.
- (b) In accordance with 10 U.S.C. 2410(a), any request for equitable adjustment to contract terms that exceeds the simplified acquisition threshold shall bear, at the time of submission, the following certificate executed by an individual authorized to certify the request on behalf of the Contractor:

I certify that the request is made in good faith, and that the supporting data are accurate and complete to the best of my knowledge and belief.

(Official's Name)	 	
(Title)	 	

- (c) The certification in paragraph (b) of this clause requires full disclosure of all relevant facts, including--
- (1) Cost or pricing data if required in accordance with subsection 15.403-4 of the Federal Acquisition Regulation (FAR); and
- (2) Information other than cost or pricing data, in accordance with subsection 15.403-3 of the FAR, including actual cost data and data to support any estimated costs, even if cost or pricing data are not required.
- (d) The certification requirement in paragraph (b) of this clause does not apply to----
- (1) Requests for routine contract payments; for example, requests for payment for accepted supplies and services, routine vouchers under a cost-reimbursement type contract, or progress payment invoices; or
- (2) Final adjustment under an incentive provision of the contract.

252.244-7000 SUBCONTRACTS FOR COMMERCIAL ITEMS AND COMMERCIAL COMPONENTS (DOD) (NOV 2005)

In addition to the clauses listed in paragraph (c) of the Subcontracts for Commercial Items clause of this contract (Federal Acquisition Regulation 52.244-6), the Contractor shall include the terms of the following clauses, if applicable, in subcontracts for commercial items or commercial components, awarded at any tier under this contract:

252.225-7014 Preference for Domestic Specialty Metals, Alternate I (10 U.S.C. 2241 note).

252.247-7023 Transportation of Supplies by Sea (10 U.S.C. 2631).

252.247-7024 Notification of Transportation of Supplies by Sea (10 U.S.C. 2631).

(End of clause)

252.247-7023 Transportation of Supplies by Sea (MAY 2002)

- (a) Definitions. As used in this clause --
- (1) "Components" means articles, materials, and supplies incorporated directly into end products at any level of manufacture, fabrication, or assembly by the Contractor or any subcontractor.
- (2) "Department of Defense" (DoD) means the Army, Navy, Air Force, Marine Corps, and defense agencies.
- (3) "Foreign flag vessel" means any vessel that is not a U.S.-flag vessel.
- (4) "Ocean transportation" means any transportation aboard a ship, vessel, boat, barge, or ferry through international waters.
- (5) "Subcontractor" means a supplier, materialman, distributor, or vendor at any level below the prime contractor whose contractual obligation to perform results from, or is conditioned upon, award of the prime contract and who is performing any part of the work or other requirement of the prime contract.
- (6) "Supplies" means all property, except land and interests in land, that is clearly identifiable for eventual use by or owned by the DoD at the time of transportation by sea.
- (i) An item is clearly identifiable for eventual use by the DoD if, for example, the contract documentation contains a reference to a DoD contract number or a military destination.
- (ii) "Supplies" includes (but is not limited to) public works; buildings and facilities; ships; floating equipment and vessels of every character, type, and description, with parts, subassemblies, accessories, and equipment; machine tools; material; equipment; stores of all kinds; end items; construction materials; and components of the foregoing.
- (7) "U.S.-flag vessel" means a vessel of the United States or belonging to the United States, including any vessel registered or having national status under the laws of the United States.
- (b)(1) The Contractor shall use U.S.-flag vessels when transporting any supplies by sea under this contract.
- (2) A subcontractor transporting supplies by sea under this contract shall use U.S.-flag vessels if-

- (i) This contract is a construction contract; or
- (ii) The supplies being transported are--
- (A) Noncommercial items; or
- (B) Commercial items that--
- (1) The Contractor is reselling or distributing to the Government without adding value (generally, the Contractor does not add value to items that it contracts for f.o.b. destination shipment);
- (2) Are shipped in direct support of U.S. military contingency operations, exercises, or forces deployed in humanitarian or peacekeeping operations; or
- (3) Are commissary or exchange cargoes transported outside of the Defense Transportation System in accordance with 10 U.S.C. 2643.
- (c) The Contractor and its subcontractors may request that the Contracting Officer authorize shipment in foreign-flag vessels, or designate available U.S.-flag vessels, if the Contractor or a subcontractor believes that --
- (1) U.S.-flag vessels are not available for timely shipment;
- (2) The freight charges are inordinately excessive or unreasonable; or
- (3) Freight charges are higher than charges to private persons for transportation of like goods.
- (d) The Contractor must submit any request for use of other than U.S.-flag vessels in writing to the Contracting Officer at least 45 days prior to the sailing date necessary to meet its delivery schedules. The Contracting Officer will process requests submitted after such date(s) as expeditiously as possible, but the Contracting Officer's failure to grant approvals to meet the shipper's sailing date will not of itself constitute a compensable delay under this or any other clause of this contract. Requests shall contain at a minimum --
- (1) Type, weight, and cube of cargo;
- (2) Required shipping date;
- (3) Special handling and discharge requirements;
- (4) Loading and discharge points;
- (5) Name of shipper and consignee;
- (6) Prime contract number; and
- (7) A documented description of efforts made to secure U.S.-flag vessels, including points of contact (with names and telephone numbers) with at least two U.S.-flag carriers contacted. Copies of telephone notes, telegraphic and facsimile message or letters will be sufficient for this purpose.
- (e) The Contractor shall, within 30 days after each shipment covered by this clause, provide the Contracting Officer and the Maritime Administration, Office of Cargo Preference, U.S. Department of Transportation, 400 Seventh Street SW., Washington, DC 20590, one copy of the rated on board vessel operating carrier's ocean bill of lading, which shall contain the following information:
- (1) Prime contract number;

(2) Name of vessel;			
(3) Vessel flag of registry;			
(4) Date of loading;			
(5) Port of loading;			
(6) Port of final discharge;			
(7) Description of commodity	<i>y</i> ;		
(8) Gross weight in pounds a	nd cubic feet if available;		
(9) Total ocean freight in U.S	. dollars; and		
(10) Name of the steamship of	ompany.		
(f) The Contractor shall provi	ide with its final invoice under t	his contract a representation that to the be	est of its
(1) No ocean transportation v	vas used in the performance of t	his contract;	
(2) Ocean transportation was	used and only U.Sflag vessels	were used for all ocean shipments under	the contract;
(3) Ocean transportation was U.Sflag ocean transportation		e written consent of the Contracting Offic	cer for all non-
		oments were made on non-U.Sflag vesse hall describe these shipments in the follow	
ITEM DESCRIPTION	CONTRACT LINE ITEMS	QUANTITY	
TOTAL			
Contractor as an improper in has been unauthorized use of	voice for the purposes of the Pro	tation, the Government will reject and recompt Payment clause of this contract. In formance of this contract, the Contractinorized use.	the event there

- (h) In the award of subcontracts for the types of supplies described in paragraph (b)(2) of this clause, the Contractor shall flow down the requirements of this clause as follows:
- (1) The Contractor shall insert the substance of this clause, including this paragraph (h), in subcontracts that exceed the simplified acquisition threshold in part 2 of the Federal Acquisition Regulation.
- (2) The Contractor shall insert the substance of paragraphs (a) through (e) of this clause, and this paragraph (h), in subcontracts that are at or below the simplified acquisition threshold in part 2 of the Federal Acquisition Regulation.

252.247-7024 Notification of Transportation of Supplies by Sea (MAR 2000)

- (a) The Contractor has indicated by the response to the solicitation provision, Representation of Extent of Transportation by Sea, that it did not anticipate transporting by sea any supplies. If, however, after the award of this contract, the Contractor learns that supplies, as defined in the Transportation of Supplies by Sea clause of this contract, will be transported by sea, the Contractor --
- (1) Shall notify the Contracting Officer of that fact; and
- (2) Hereby agrees to comply with all the terms and conditions of the Transportation of Supplies by Sea clause of this contract.
- (b) The Contractor shall include this clause; including this paragraph (b), revised as necessary to reflect the relationship of the contracting parties--
- (1) In all subcontracts under this contract, if this contract is a construction contract; or
- (2) If this contract is not a construction contract, in all subcontracts under this contract that are for-
- (i) Noncommercial items; or
- (ii) Commercial items that--
- (A) The Contractor is reselling or distributing to the Government without adding value (generally, the Contractor does not add value to items that it subcontracts for f.o.b. destination shipment);
- (B) Are shipped in direct support of U.S. military contingency operations, exercises, or forces deployed in humanitarian or peacekeeping operations; or
- (C) Are commissary or exchange cargoes transported outside of the Defense Transportation System in accordance with 10 U.S.C. 2643.

(End of clause)

Section 00800 - Special Contract Requirements

CLAUSES INCORPORATED BY FULL TEXT

52.211-10 COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK (APR 1984)

The Contractor shall be required to (a) commence work under this contract within **TEN** (10) calendar days after the date the Contractor receives the notice to proceed, (b) prosecute the work diligently, and (c) complete the entire work ready for use not later than **570 calendar days from the acknowledgement of the Notice to Proceed**. The time stated for completion shall include final cleanup of the premises.

(End of clause)

52.211-12 LIQUIDATED DAMAGES--CONSTRUCTION (SEP 2000)

- (a) If the Contractor fails to complete the work within the time specified in the contract, the Contractor shall pay liquidated damages to the Government in the amount of \$2,250.00 for each calendar day of delay until the work is completed or accepted.
- (b) If the Government terminates the Contractor's right to proceed, liquidated damages will continue to accrue until the work is completed. These liquidated damages are in addition to excess costs of repurchase under the Termination clause.

(End of clause)

52.211-13 TIME EXTENSIONS (SEP 2000)

Time extensions for contract changes will depend upon the extent, if any, by which the changes cause delay in the completion of the various elements of construction. The change order granting the time extension may provide that the contract completion date will be extended only for those specific elements related to the changed work and that the remaining contract completion dates for all other portions of the work will not be altered. The change order also may provide an equitable readjustment of liquidated damages under the new completion schedule.

(End of clause)

52.215-19 NOTIFICATION OF OWNERSHIP CHANGES (OCT 1997)

- (a) The Contractor shall make the following notifications in writing:
- (1) When the Contractor becomes aware that a change in its ownership has occurred, or is certain to occur, that could result in changes in the valuation of its capitalized assets in the accounting records, the Contractor shall notify the Administrative Contracting Officer (ACO) within 30 days.
- (2) The Contractor shall also notify the ACO within 30 days whenever changes to asset valuations or any other cost changes have occurred or are certain to occur as a result of a change in ownership.

- (b) The Contractor shall--
- (1) Maintain current, accurate, and complete inventory records of assets and their costs;
- (2) Provide the ACO or designated representative ready access to the records upon request;
- (3) Ensure that all individual and grouped assets, their capitalized values, accumulated depreciation or amortization, and remaining useful lives are identified accurately before and after each of the Contractor's ownership changes; and
- (4) Retain and continue to maintain depreciation and amortization schedules based on the asset records maintained before each Contractor ownership change.

The Contractor shall include the substance of this clause in all subcontracts under this contract that meet the applicability requirement of FAR 15.408(k).

(End of clause)

52.236-4 PHYSICAL DATA (APR 1984)

Data and information furnished or referred to below is for the Contractor's information. The Government shall not be responsible for any interpretation of or conclusion drawn from the data or information by the Contractor.

- (a) The indications of physical conditions on the drawings and in the specifications are the result of site investigations by either surveys, core borings, and/or reconnaissance.
- (b) Weather conditions. Information regarding weather conditions is available in Technical Specification Section 01060 for examination by the bidders. If additional information concerning weather is required prospective bidders should contact the U. S. Army Corps of Engineers, Afghanistan Engineer District, House 1 Street 1, West Wazir Akbar Khan, (behind Amani High School), Kabul, Afghanistan.
- (c) Transportation facilities. It shall be the responsibility of the Contractor to make his own investigation of available roads for transportation, of load limits of bridges on the roads, and of other road conditions, which may effect transportation of materials, equipment, and personnel to the site of the work.

(End of clause)

52.246-21 WARRANTY OF CONSTRUCTION (MAR 1994)

- (a) In addition to any other warranties in this contract, the Contractor warrants, except as provided in paragraph (i) of this clause, that work performed under this contract conforms to the contract requirements and is free of any defect in equipment, material, or design furnished, or workmanship performed by the Contractor or any subcontractor or supplier at any tier.
- (b) This warranty shall continue for a period of 1 year from the date of final acceptance of the work. If the Government takes possession of any part of the work before final acceptance, this warranty shall continue for a period of 1 year from the date the Government takes possession.

- (c) The Contractor shall remedy at the Contractor's expense any failure to conform, or any defect. In addition, the Contractor shall remedy at the Contractor's expense any damage to Government-owned or controlled real or personal property, when that damage is the result of--
- (1) The Contractor's failure to conform to contract requirements; or
- (2) Any defect of equipment, material, workmanship, or design furnished.
- (d) The Contractor shall restore any work damaged in fulfilling the terms and conditions of this clause. The Contractor's warranty with respect to work repaired or replaced will run for 1 year from the date of repair or replacement.
- (e) The Contracting Officer shall notify the Contractor, in writing, within a reasonable time after the discovery of any failure, defect, or damage.
- (f) If the Contractor fails to remedy any failure, defect, or damage within a reasonable time after receipt of notice, the Government shall have the right to replace, repair, or otherwise remedy the failure, defect, or damage at the Contractor's expense.
- (g) With respect to all warranties, express or implied, from subcontractors, manufacturers, or suppliers for work performed and materials furnished under this contract, the Contractor shall--
- (1) Obtain all warranties that would be given in normal commercial practice;
- (2) Require all warranties to be executed, in writing, for the benefit of the Government, if directed by the Contracting Officer; and
- (3) Enforce all warranties for the benefit of the Government, if directed by the Contracting Officer.
- (h) In the event the Contractor's warranty under paragraph (b) of this clause has expired, the Government may bring suit at its expense to enforce a subcontractor's, manufacturer's, or supplier's warranty.
- (i) Unless a defect is caused by the negligence of the Contractor or subcontractor or supplier at any tier, the Contractor shall not be liable for the repair of any defects of material or design furnished by the Government nor for the repair of any damage that results from any defect in Government-furnished material or design.
- (j) This warranty shall not limit the Government's rights under the Inspection and Acceptance clause of this contract with respect to latent defects, gross mistakes, or fraud.

52.249-5000 BASIS FOR SETTLEMENT OF PROPOSALS

Actual costs will be used to determine equipment costs for a settlement proposal submitted on the total cost basis under FAR 49.206-2(b). In evaluating a terminations settlement proposal using the total cost basis, the following principles will be applied to determine allowable equipment costs:

- (f) Actual costs for each piece of equipment, or groups of similar serial or series
- equipment, need not be available in the contractor's accounting records to determine total actual equipment costs.
 - (g) If equipment costs have been allocated to a contract using predetermined rates , those charges will be adjusted to actual costs.

- (3) Recorded job costs adjusted for unallowable expenses will be used to determine equipment operating expenses.
- (4) Ownership costs (depreciation) will be determined using the contractor's depreciation schedule (subject to the provisions of FAR 31.205-11).
- (5) License, taxes, storage and insurance costs are normally recovered as an indirect expense and unless the contractor charges these costs directly to contracts, they will be recovered through the indirect expense rate.

252.232-7003 ELECTRONIC SUBMISSION OF PAYMENT REQUESTS (JAN 2004)

- (a) Definitions. As used in this clause--
- (1) Contract financing payment and invoice payment have the meanings given in section 32.001 of the Federal Acquisition Regulation.
- (2) Electronic form means any automated system that transmits information electronically from the initiating system to all affected systems. Facsimile, e-mail, and scanned documents are not acceptable electronic forms for submission of payment requests. However, scanned documents are acceptable when they are part of a submission of a payment request made using one of the electronic forms provided for in paragraph (b) of this clause.
- (3) Payment request means any request for contract financing payment or invoice payment submitted by the Contractor under this contract.
- (b) Except as provided in paragraph (c) of this clause, the Contractor shall submit payment requests using one of the following electronic forms:
- (1) Wide Area WorkFlow-Receipt and Acceptance (WAWF-RA). Information regarding WAWF-RA is available on the Internet at https://wawf.eb.mil.
- (2) Web Invoicing System (WInS). Information regarding WInS is available on the Internet at https://ecweb.dfas.mil.
- (3) American National Standards Institute (ANSI) X.12 electronic data interchange (EDI) formats.
- (i) Information regarding EDI formats is available on the Internet at http://www.X12.org.
- (ii) EDI implementation guides are available on the Internet at http://www.dfas.mil/ecedi.
- (4) Another electronic form authorized by the Contracting Officer.
- (c) If the Contractor is unable to submit a payment request in electronic form, or DoD is unable to receive a payment request in electronic form, the Contractor shall submit the payment request using a method mutually agreed to by the Contractor, the Contracting Officer, the contract administration office, and the payment office.
- (d) In addition to the requirements of this clause, the Contractor shall meet the requirements of the appropriate payment clauses in this contract when submitting payments requests.

(End of clause)

252.236-7001 CONTRACT DRAWINGS AND SPECIFICATIONS (AUG 2000)

- (a) The Government will provide to the Contractor, without charge, one set of contract drawings and specifications, except publications incorporated into the technical provisions by reference, in electronic or paper media as chosen by the Contracting Officer.
- (b) The Contractor shall--
- (1) Check all drawings furnished immediately upon receipt;
- (2) Compare all drawings and verify the figures before laying out the work;
- (3) Promptly notify the Contracting Officer of any discrepancies;
- (4) Be responsible for any errors that might have been avoided by complying with this paragraph (b); and
- (5) Reproduce and print contract drawings and specifications as needed.
- (c) In general--
- (1) Large-scale drawings shall govern small-scale drawings; and
- (2) The Contractor shall follow figures marked on drawings in preference to scale measurements.
- (d) Omissions from the drawings or specifications or the misdescription of details of work that are manifestly necessary to carry out the intent of the drawings and specifications, or that are customarily performed, shall not relieve the Contractor from performing such omitted or misdescribed details of the work. The Contractor shall perform such details as if fully and correctly set forth and described in the drawings and specifications.
- (e) The work shall conform to the specifications and the contract drawings identified on the following index of drawings:

Title File Drawing No.

SEE ATTACHED DRAWINGS

(End of clause)

SPECIAL CLAUSES

- (h) WORKERS COMPSENASTION INSURACNE (DEFENSE BASE ACT) CONSTRUCTION (NOV 2005)
 - (1) This clause supplements FAR Clause 52.228-3
 - (2) The contractor agrees to procure Defense Base Act (DBA) insurance pursuant to the terms of the contract between the U.S. Army Corps of Engineers (USACE) and the USACE DBA insurance carrier unless the contractor has a DBA self-insurance program approved by the Department of Labor. The contractor shall submit a copy of the Department of Labor's approval to the contracting officer upon contract award. The current rate under the USACE contract is \$8.50 per \$100 of compensation for construction.

- (3) The contractor agrees to insert a clause substantially the same as the one in all subcontracts to which DBA is applicable. Subcontractors shall be required to insert a similar clause in any of their subcontracts subject to the DBA.
- (4) Should the rates for DBA insurance coverage increase or decrease during the performance of this contract, USACE shall modify the contract accordingly.

52.000-4106 DEFENSE BASE ACT INSURANCE RATES – LIMITATION FIXED-PRICE (NOV 2005)

(5) The U.S. Army Corps of Engineers (USACE) has entered into a contract with an insurance carrier to provide all Defense Base Act (DBA) insurance to USACE contractors at a contracted rate under the OSD/USACE Centrally-Managed Pilot DBA Insurance Program. The rates for this insurance are as follows:

Services @ \$5.00 per \$100 of compensation; or

Construction @ \$8.50 per \$100 of compensation.

(6)	Bidders/Offerors should compute the total compensation (direct salary plus differential, but
	excluding per diem, housing allowance and other miscellaneous post allowances) to be paid to employees
	who will be covered by DBA insurance and the cost of DBA totals in the spaces provided for the base
	period and whatever extension there may be thereafter, if applicable

(1)	Compensation of Covered Employees:	
(2)	Defense Base Act Insurance Costs:	
(3)	Total Cost:	

(7) Bidders/Offerors shall include a statement as to whether or not local nationals or third country nationals will be employed on the resultant contract

End of clause

• CNA Insurance - Contractor - Insurance Carrier

- Roger Ellickson (312) 822-4395 Roger.ellickson@cna.com
The Continental Insurance Co.
Roger Ellickson
DBA CNA Insurance
333 S. Wabash Avenue
Chicago, IL 60685-1809

• Rutherfoord International – Insurance Broker

- James Walczak (703) 813-6544 jim.walczak@rutherfoord.com Rutherfoord International James Walczak 5500 Cherokee Avenue, Suite 300 Alexandria, VA 22312

ECONOMIC SURVEILLANCE

Economic Surveillance

Contractor shall report average pay rates and employment levels, for both domestic and international employees monthly. The information will be reported by labor category (as specified by USACE) and be specific to each work active work site. In addition the contractor shall report monthly non-labor contract spending for domestic and international contract expenses. This information will be reported by category (as specified by USACE) and will be specific to each active work site.

SECTION 01010 SCOPE OF WORK

1. General

- 1.1 All work in this contract is for the design, construction, and renovation of the G-2 Intelligence Headquarters Command, Headquarters Security Brigade in Kabul, Afghanistan, located 34 30' 30"N 69 11' 30"E. Work to be performed shall consist of a site survey, Master Plan and complete design and construction for dining facility, barracks, administration buildings, latrine facilities, gym/auditorium, recreation center/library/market building, laundry facilities, fire station, guard towers/buildings; construction of Vehicle Maintenance Facility and motor pool for 500 vehicles to include Petroleum Oil Lubricant Storage Building and Fuel Point; construction of a band practice hall, running track, and soccer field; renovation of the parade ground and swimming pool; renovation of entry control buildings and bunker; construction of Prime Power Plant and electrical distribution system; development of raw water source (i.e. ground source water wells) to support approximately 1500 persons; construction of sanitary sewer collection and treatment system; development of water wells; potable water booster pumps and associated controls; installation of water distribution system; construction of water storage tower and tanks; design and construction of data, voice and emergency communication systems including centralized communications hub, and underground copper cable installed in duct bank system; repair of perimeter wall in accordance with Anti-Terrorism/Force-Protection measures; construct a wall around the existing clinic building on site; design, construct, and renovate access roads. Drainage Plan shall incorporate a storm water run-off plan and allow for proper site drainage to include grading throughout the site with drainage for new and existing structures. Prepare a site grading and drainage plan and obtain approval prior to construction. The site Master Plan shall incorporate existing facilities and planned locations for additional facilities included in the basic contract and all options. Prepare a site grading and drainage plan and obtain approval prior to construction. Provide site and UXO clearance prior to construction activity. All utilities shall be complete and operational prior to occupancy. It is the contractor's responsibility to ensure that the designs are complete and are in compliance with the latest applicable buildings codes and regulations. Any time two or more statements in RFP, are in conflict; the most stringent shall apply. The contractor shall provide to the U.S. Government As-Built drawings in ACAD version 2005 after the constructions are completed but before the facilities are accepted as substantially complete. The As-Built drawings shall contain all the modifications and changes during the construction.
 - 1.2 Work shall be executed in accordance with the Technical Requirements in Section 01015 of this scope and of the base contract. The Contractor shall also use Appendices A, B, and C to his/her benefit. In case of question or ambiguity, the Contracting Officer (KO) shall make the final decision. The KO shall furnish the decision in writing if requested by the contractor. The Contractor shall, in accordance with the terms and conditions more particularly set forth below, furnish all labor, management, facilities, supplies, equipment and material, and execute the items necessary for the performance of the work. During execution of the work, the Contractor shall provide adequate professional supervision and documentation for quality control to assure the accuracy, quality, completeness, and progression of the work as per Section 01452. Designs shall be approved by the Contracting Officer's Representative (COR) prior to the start of work. Contractor shall verify all dimensions provided in the scope of work prior to the start of any construction. The entire project must be completed 570 days from the acknowledgement of the Notice to Proceed. All Base Bid items of this project must be completed 570 days from the acknowledgement of the Notice to Proceed unless specified in Section 01010 Scope of Work, Paragraph 1.8. A presolicitation conference and site visit will be held for bidders to familiarize them with the site and will be scheduled for 5 June, 2006.
 - 1.3 All information shall be presented in English.
 - 1.4 All material approved shall become standardized material to be used throughout the facilities under this contract. Deviation from the approved material is not authorized unless approved by the KO. Different subcontractors shall not use different material or standards under this contract. All supplied materials shall be new.
 - 1.5 The Contractor shall submit a color chart of all finishes for walls, floors, bathroom tiles, and any other items requiring selection of final colors to the KO for an approval NLT 90 days prior to scheduled installation. All

materials and colors shall be approved prior to ordering or installing any materials. Provide two color boards indicating materials and colors.

- 1.6 Final acceptance of the work The Contractor shall schedule an inspection with the government for final acceptance of the work, following substantial completion of all elements of the project described in this contract and after performing a thorough completion inspection himself. Based upon a visual walk through of the project site, the government will determine if the facility is complete and usable, along with any minor punch list items that require correction. The Contractor shall have 30 days from final acceptance to correct any punch list items. If punch list items are not satisfactorily completed within that timeframe, the government reserves the right to issue a deductive modification for the unresolved deficiencies and pursue completion of the work via another contractor.
- 1.7 Warranty: The Contractor shall repair and/or replace all defective materials or workmanship, except for roofs, at his own cost for a warranty period of one year commencing upon the date of final acceptance of the project. The Contractor shall repair and/or replace all defective materials or workmanship at his own cost for a warranty period of five years for all roofs commencing upon the date of final acceptance of the project.
- 1.8 Work shall be completed in accordance with the table and paragraphs below. This table provides completion durations after Contract Award.

Line Item	Task	Completion Date Calendar Days after Contract Award	Liquidated Damages per Calendar Day
Base Items			\$2,250
0001 Paragraph 2.1	Prepare Master Plan	30	
0002	Prepare Designs and Drawings for	150	
Paragraph 2.2	All Base Bid and Optional Items		
0003 Paragraph 2.3	Provide Site/UXO Clearance	In phases (60-300 days) as required to start facilities	
0004 Paragraph 2.4	Design and Construct Prime Power Plant And Electrical Distribution System	570**	
0005 Paragraph 2.5	Design and Construct Water System	300	
0006 Paragraph 2.6	Design and Construct Sewer System	300	
0007 Paragraph 2.7	Construct Site Drainage per Master Plan	300	
0008 Paragraph 2.8	Design, Construct, Renovate Access Roads, Parking Areas, and Parade Field	570	
0009 Paragraph 2.9	Design and Construct Perimeter Wall and Two Gates	300	
00010 Paragraph 2.10	Design, Construct, and/or Renovate Guard Towers/Buildings	300	
0011 Paragraph 2.11	Renovate Entry Control Buildings	300	
0012 Paragraph 2.12	Design and Construct DFAC	300**	
0013 Paragraph 2.13	Design and Construct Headquarters Security Brigade (HSB) and ANA Band Complex	570	

0014 Paragraph 2.14	Design and Construct HSB Vehicle Maintenance Complex and Motor Pool	570	
0015 Paragraph 2.15	Design and Construct G-2 Complex	300**	

Optional Bid Items			\$2,250
Optional Dia Items			Ψ2,230
0016	Design and Construct Additional	300	
Paragraph 3.1	Bachelor Officer Quarters		
Option 1			
0017	Demolish Additional Buildings and	300	
Paragraph 3.2	Structures and Removal of Debris		
Option 2			
0018	Renovate Centralized	300	
Paragraph 3.3	Communications Hub and		
Option 3	Underground Communication		
•	Conduits		
0019	Design and Construct	300	
Paragraph 3.4	Communications Tower		
Option 4			
0020	Design and Construct Fire Station	300	
Paragraph 3.5			
Option 5			
0021	Design and Construct Running	300	
Paragraph 3.6	Track and Soccer Field		
Option 6			
0022	Design and Construct	300	
Paragraph 3.7	Gym/Auditorium		
Option 7			
0023	Renovate G-2 Command Admin	300	
Paragraph 3.8	Building		
Option 8			
0024	Renovate Director of Public Works	300	
Paragraph 3.9	Building		
Option 9			
0025	Renovate Recreation Center,	300	
Paragraph 3.10	Library, and Market Building		
Option 10			
0026	Design and Construct Laundry	300	
Paragraph 3.11	Facility		
Option 11			
0027	Renovate Swimming Pool	300	
Paragraph 3.12			
Option 12			
0028	Renovate Bunker for Storage	60	
Paragraph 3.13			

^{*} Optional Bid Items: The 300 day completion date is calculated if decision to exercise options is made on the 90^{th} day.

^{**} $\underline{PHASE\ I:}$ As outlined in the table above, the G-2 Complex shall be completed in 300 days. The Contractor will demolish additional buildings and structures and remove debris from the future HSB/ANA Band Complex

site during the time the G-2 Complex are being designed and constructed. There will be beneficial occupancy once these structures are constructed, so the Contractor shall provide temporary power, water, and sewer capabilities to the G-2 Complex while remaining construction on-site continues if necessary.

- *** PHASE II: On the 301st day or earlier, the G-2 Complex shall be complete and handed over with temporary utilities. Only then will the Contractor be allowed to start renovation work on the Recreation Center/Library/Market Building, if the option is awarded.
- 1.9 Submittals and a Submittal Register are required as in Section 01335 of the Basic Contract.
- 1.10 Contract Performance Period/Completion date: 570 calendar days from the acknowledgement of the Notice to Proceed. Base Bid items to be completed 570 days from the acknowledgement of the Notice to Proceed unless otherwise noted in the table of Paragraph 1.8. Decision to exercise options will be made within 90 days of award of Base Contract.
- 1.11 Liquidated Damages The contractor shall be charged \$2,250 per day for each calendar day the work extends beyond the contract completion due to inexcusable delays.
- 2. Items of Work for Design and Construction

BASE BID ITEMS: (See Attachment A for Concept of Layout)

- A. Prepare a Master Plan, to include base bid and all option items (paragraph 2.1)
- B. Prepare Designs and Drawings for All Base and Optional Items (paragraph 2.2)
- C. Provide Site/UXO Clearance (paragraph 2.3)
- D. Design and Construct Prime Power Plant and Electrical Distribution System (paragraph 2.4)
- E. Design and Construct Water System (paragraph 2.5)
- F. Design and Construct Sewer System (paragraph 2.6)
- G. Construct Site Drainage per Master Plan (paragraph 2.7)
- H. Design, Construct, Renovate Access Roads, Parking Areas, and Parade Field (paragraph 2.8)
- I. Design and Construct Perimeter Wall and Two Gates (paragraph 2.9)
- J. Design, Construct, and/or Renovate Guard Towers/Buildings (paragraph 2.10)
- K. Renovate Entry Control Buildings (Building A, B, and C) (paragraph 2.11)
- L. Design and Construct DFAC (Building DFAC) (paragraph 2.12)
- M. Design and Construct Headquarters Security Brigade (HSB) and ANA Band Complex (paragraph 2.13)
- N. Design and Construct HSB Vehicle Maintenance Complex and Motor Pool (paragraph 2.14)
- O. Design and Construct G-2 Complex (paragraph 2.15)

OPTION ITEMS:

- A. Design and Construct Additional Bachelor Officer Quarters (paragraph 3.1)
- B. Demolish Additional Buildings and Structures and Removal of Debris (paragraph 3.2)
- C. Renovate Centralized Communications Hub and Underground Communication Conduits (paragraph 3.3)
- D. Design and Construct Communications Tower (paragraph 3.4)
- E. Design and Construct Fire Station (paragraph 3.5)
- F. Design and Construct Running Track and Soccer Field (paragraph 3.6)
- G. Design and Construct Gym/Auditorium(paragraph 3.7)
- H. Renovate G-2 Command Admin Building (paragraph 3.8)
- I. Renovate Director of Public Works Building (paragraph 3.9)
- J. Renovate Recreation Center, Library, and Market Building (paragraph 3.10)
- K. Design and Construct Laundry Facility (paragraph 3.11)
- L. Renovate Swimming Pool (paragraph 3.12)
- M. Renovate Bunker for Storage (paragraph 3.13)

2.1 SURVEYS AND MASTER PLANNING

Design of Master Plan to include all existing and new buildings, guard towers and a Site Grading and Drainage Plan with existing grades, proposed grades and building finished floor elevations. The contractor is responsible for conducting a complete survey of the existing structures, utilities and infrastructures to develop the Master Plan for the G2 Intelligence Command and Headquarters Security Brigade at Bala Hissar in Kabul. The Master Plan shall also provide a complete detailed landscape and storm water run-off plan and allowance for proper site drainage and grading throughout the compound, layout of road leading to all the buildings and to the parking area. The Master Plan shall also include the complete design of all new buildings and structures on the base and option bid items. The development of the Master Plan will include participation in a Planning Charrette (Meeting) that will be conducted at Qalaa House and scheduled by the government within one week of contract award. A Master Plan review conference shall be conducted with the contractor at Qalaa House no later than 40 days after Notice to Proceed.

2.2 PREPARE DESIGNS AND DRAWINGS FOR ALL BASE AND OPTIONAL ITEMS

The Contractor is to completely design all new buildings and structures on the base proposal, as well as the option bid items within 150 days after Notice to Proceed.

2.3 SITE CLEARING

2.3.1 The contractor shall search, identify and clear all mines and unexploded ordnances (UXO's) from the entire site. The contractor shall provide the government a letter indicating that the site is clear of mines and UXO's and is available for construction operations to proceed. All mine and UXO clearing shall be done in accordance with the International Mine Action Standards (IMAS) and clearance shall be accomplished to the anticipated foundation depth. These standards can be found at http://www.mineactionstandards.org. Work will not commence in any area that has not been cleared. For any and all areas on or around the site, it is the responsibility of the Contractor to be aware of the risk of encountering mines and UXO's and to take all actions necessary to assure a safe work area to perform the requirements of this contract. The Contractor assumes the risk of any and all personal injury, property damage or other liability, arising out of and resulting from any Contractor action hereunder. In any case the Contractor shall be responsible for identifying all mines and UXO's within the entire site. Once the mines and UXO's are identified, the Contractor shall place them in a location in accordance with IMAS. This work shall proceed in phases, concurrently with other construction efforts as determined by the contractor. If a UXO/mine is encountered after site clearance and during project construction, UXO/mine disposal shall be handled in accordance with Section 01015, Technical Requirements, paragraph 1.10.1.1.

2.3.2 The Bala Hissar site requires demolition of some existing buildings with removal and disposal of the debris. See Appendix A. The contractor shall use the site just North of the future Gym/Auditorium Building for demolition debris disposal as directed by the COR. The contractor shall excavate a 2 meter depression in the ground, fill the area with demolition debris, and backfill and compact. The specific area will be classified a nobuild zone in the future.

2.4 PRIME POWER PLANT & SITE POWER DISTRIBUTION SYSTEM 2.4.1 PRIME POWER PLANT:

Design and construct a prime power plant to provide electrical power for the entire Master Plan. It is the contractor's responsibility to calculate the full load requirements and determine the size of the generators and transformers necessary to provide total electrical power supply to the entire compound at full load. Contractor, under this Contract and in accordance with the Contractor's final design, shall construct the Power Plant, to include, prime power generators, black-start generator, switchgear, step-up transformers etc. necessary to meet electric demand loads for all facilities included in the base and optional portions of the Request for Proposal. Number of generating units shall be based on N+1 principal. Where 'N' would represent number of units required to meet initial demand loads plus 20% spare capacity and '+1' would represent a spare generator available at all times. Power Plant building under this Contract shall also provide 2 spare generator bays and necessary space for switchgear and other equipment associated with these generators to be installed at a later date. Necessary empty conduits from the spare generator bays to the spaces for future equipment shall be provided under this Contract. Power Plant building shall be constructed in such a way that it can be extended to house future additional generators and equipment as per the Contractor's Power Plant overall final design. It is

the contractor's responsibility to calculate the fuel consumption requirement for the generator based on a 4 week full load operation and provide a bulk fuel storage tank of sufficient volume to meet 4 week fuel consumption plus 10%. Provide a space next to the fuel tanks for enough additional fuel storage tanks for two spare generators based on a full load operation and provide a bulk fuel storage tanks of sufficient volume to meet 4 week fuel consumption plus 10%. All the fuel tanks will be inside a concrete-reinforced wall and water tight wall to contain any fuel spillage. The volume of the concrete reinforced wall shall be 110% of the fuel tank capacity including requirements for future generators. Provide a 50 mm diameter drain pipe with a valve thru the wall to drain water that may have cumulated inside after a rain. Generator shall have an insulated cover and sound attenuation muffler and fuel heaters for cold weather operation. Contractor is to install a crane system to lift generators for future maintenance.

2.4.2 SITE PRIMARY POWER DISTRIBUTION SYSTEM:

Contractor, under this Contract and in accordance with the Contractor's final design, shall construct an underground Site Primary Power Distribution System necessary to service all facilities awarded under the Base Bid, to include awarded options and existing buildings. In areas on the hilltop where underground power distribution system is not feasible, the Contractor will design an aboveground distribution system and submit at 35% review for COR approval.

2.5 WATER SYSTEM

Infrastructure design and construction shall serve a population of approximately 1,500 personnel. The Contractor shall install water storage, distribution mains, branches, laterals, lines and service connections to include all pipe, valves, fittings and appurtenances. Exterior water line construction shall include service to all buildings (new and existing) as described in the Scope of Work Section 01015. The required Average Daily Demand (ADD) approximation is ultimately 225,000 liters (derived from 150 liters per capita per day (lpcd).

2. 6 SEWER SYSTEM

Design and construct complete sanitary sewage collection and treatment system that includes, but is not limited to piping, connections, oil water separators, access manholes, cleanouts, treatment tanks and lagoons to support 1500 personnel.

For existing buildings to remain provide new complete sanitary sewage collection system to each building, demolish all existing sewer lines, tanks, manholes, etc, back fill and compact to 95%. Exterior sanitary sewer line construction shall include service to all buildings on site including existing. System shall be designed to connect to city sewer in the future. The sewer system shall conform to SECTION 01015 TECHNICAL REQUIREMENTS.

2.7 FINAL SITE GRADING AND DRAINAGE

Drainage Plan will be prepared as part of this scope. The contractor shall be responsible for the final site grading and drainage required for entire compound, all new buildings, existing buildings, old fort, and any optional items that are awarded. The Contractor must design the storm water management to efficiently remove water from the site without flooding or ponding within the compound. It is expected that storm water management will be accomplished primarily through site grading. Other site features may be proposed as betterments in the Contractors' proposal. The final site grading and drainage shall be in accordance with the entire site grading and drainage plan.

2.8 ROAD NETWORK, PARADE FIELD, AND PARKING AREAS

2.8.1 ROAD NETWORK

Design and construct a 7.3m wide, two lane asphalt road network within the compound with access to all building areas new and existing. The Contractor shall also pave with asphalt a two lane main road into the compound, extending from the paved public highway, and through the main entrance.

2.8.2 PARADE FIELD, AND PARKING AREAS

Design and pave with asphalt the parade field and parking areas on the compound. Contractor shall, in addition, repair/upgrade the walkway around the monument for lost soldiers just east of the parade field. Contractor shall delineate individual vehicle parking spaces with painted white lines at all parking lots.

2.8.3 OLD FORT AREA

Grade, lay gravel, and compact road leading up to Old Fort Area and parking lot at the top of the hill.

2.9 FORCE PROTECTION PERIMETER WALL AND TWO GATES

2.9.1 EXISTING PERIMETER WALL FROM ENTRY CONTROL BUILDING A TO EXISITING CLINIC Demolish the existing perimeter wall and reconstruct a new perimeter brick and stucco wall that matches the existing wall from Entry Control Building "A" to the existing Clinic. The Clinic shall be completely enclosed to the exterior of the new perimeter wall. The new perimeter wall shall be designed and built to integrate back into the existing wall once it has enclosed the Clinic. The perimeter brick and stucco wall shall be a minimum of 3 meters above finish grade to top of concertina wire. All foundations shall extend below frost line (800 mm min). Concertina wire shall be double 45 degree outriggers on top of fence posts with 3 strands of 14 gage barbed wire on each side and a center concertina wire.

2.9.2 PERIMETER WALL

The entire perimeter wall shall be constructed of brick and stucco wall with concertina wire on top with the exception of the historical wall on the hill. Repair and upgrade existing perimeter brick and stucco wall to match existing wall. Design and construct new perimeter brick and stucco wall to match existing wall in areas where brick and stucco wall do not exist. Design, construct, and match a new perimeter brick and stucco wall to go around the outside of the historical wall. New wall distance and placement outside of the historical wall shall be determined by the COR. Once beyond the historical site area, reintegrate the perimeter walls to maintain a continuous enclosure. The perimeter brick and stucco wall shall be a minimum of 3 meters above finish grade to top of concertina wire. All foundations shall extend below frost line (800 mm min). Concertina wire shall be double 45 degree outriggers on top of fence posts with 3 strands of 14 gage barbed wire on each side and a center concertina wire. See Appendix B for locations of new wall construction and wall repair.

2.9.3 TWO GATES

Provide new decorative metal gates, drop arms, and lighting for the north and east entrances to conform with SECTION 01015 TECHNICAL REQUIREMENTS.

2.10GUARD TOWERS/BUILDINGS

2.10.1 RENOVATE GUARD TOWERS

Upgrade and renovate the three existing guard towers. Existing guard towers along the perimeter wall shall be designed so that the visual line of site between guard towers/buildings, and the perimeter wall is not interrupted and is less than 400m apart. Minimum utility service required at all guard towers/buildings shall include electric power, split type cooling/heating unit or through the wall self-contained unit shall be provided, and telephone service to include wiring to Communication Building through a loop to all towers with redundant feed from loop to Communication Building. All upgrade/renovation shall consist of exterior repairs, roof repairs, interior repairs, new lighting, RJ45 jacks, and electrical upgrades. This will include related street paving, and walks. The building will require replacement windows and doors.

2.10.2 DESIGN AND CONSTRUCT GUARD TOWERS

Construct a minimum of 3 new guard towers to meet the visibility requirements listed below. Construction of guard towers in old fort area shall be of stone to match existing construction. New guard towers along the perimeter wall shall be designed so that the visual line of site between guard towers/buildings and the perimeter wall is not interrupted and is less than 400m apart. New towers along the perimeter wall shall be tall enough for a guard 167cm tall to see over the perimeter wall and be able to see the ground to within 2 meters of the perimeter wall. Each guard tower shall hold two guards comfortably. The towers shall have 360 degree visibility. Minimum utility service required at all guard towers/buildings shall include electric power, split type cooling/heating unit or through the wall self-contained unit shall be provided, and telephone service to include wiring to Communication Building through a loop to all towers with redundant feed from loop to Communication Building. Provide a minimum of two RJ-45 jacks per guard tower/building. Electric service, in addition to general lighting, HVAC, and power loads for the tower, shall also include sufficient power for two 1,000 watts search light. Provide two 1,000 watts search lights and properly mount them as to provide maximum outer perimeter wall coverage as possible from the guard tower/building. Provide 13 mm lexan

glazing in aluminum windows. Provide heat as required to maintain 70 degrees. All doors shall be steel with steel fames. The contractor shall provide, connect, and install electrical service and communication.

2.11ENTRY CONTROL BUILDINGS

Upgrade/renovate the existing Entry Control Buildings A, B, and C at the two entrances. The upgrade/renovation shall consist of exterior repairs, roof repairs, interior repairs, painting, new lighting, RJ45 jacks, and electrical upgrades. This will include related street paving, and walks. The building will require replacement windows and doors. Minimum utility service required at all entry control buildings shall include electric power, one split type minimum 18,000 BTU cooling/heating unit in each room, and telephone service to include wiring to Communication Building through a loop to all towers with redundant feed from loop to Communication Building. Provide a minimum of two RJ-45 jacks per entry control building. The contractor shall provide, connect, and install electrical service and communication.

2.12DINING FACILITY

Design and build a new dining facility (DFAC) to accommodate 300 enlisted and 75 officer simultaneous seating. The DFAC shall be designed and constructed to serve 1500 persons in a two hour time period, three times a day, seven days a week factoring each person taking 30 minutes. The contractor shall provide light and heat for the entire facility. Heating shall be provided by split type minimum 18,000 BTU cooling/heating units. Cooling shall be ceiling mounted minimum 52-inch fans as to conform with SECTION 01015 TECHNICAL REQUIREMENTS. The DFAC shall be designed to use propane, not wood or coal. The propane tank shall be installed using U.S. methods of installation with the appropriate safety features. Provide storage tanks for enough propane for four (4) weeks use. Propane tanks shall be enclosed in a reinforced concrete walled enclosure with roof and steel gates. See NFPA 58 Liquid Petroleum Gas and Table 6.3.1 for requirements and distance from occupied buildings. The DFAC shall have appropriate propane heated tea brewing stations appropriate for the culture. Contractor shall provide a 5% drainage slope 2 meters out from the buildings on all sides. Integrate building drainage grading into overall site grading and drainage plan. The following notes shall be incorporated into the DFAC design:

- Provide Refrigerators/Freezers and storage: sized to carry 2 weeks worth of food.
- The ventilation system, hood with exhaust fan above cooking stoves, shall be provided to prevent smoke generated by food preparation using propane cooking stoves and tea boilers from migrating into the dining area
- Provide 10 propane burning tea boilers. Provide individual flues through the roof.
- Provide 10 wood cook stoves. Design and install propane burning Afghan style cooking stoves and chimneys as required in kitchen (cooking is done in large caldrons 1000 mm in diameter 800 mm deep, provide wood stove with enough heat to accomplish task). Provide design calculations indicating adequacy of stoves provided; to meet the requirements to prepare meals for 1500 persons in a two hour time period three times a day, seven days a week factoring each person taking 30 minutes. Provide cast iron cook top in the kitchen with minimum thickness of 1.5 cm. Provide circular cut outs. Consult with the KO for the diameter of the circular cutouts. Provide steel infill plates for all cut out openings. Cook top can be made of several pieces for ease of handling. Adjacent plates shall be tight fitting to each other. Wrap top over front edge 200 mm. Stove is to be site built of high heat masonry units with steel frame and heat resistant concrete to match flooring. Provide cast iron doors.
- Kitchen area shall be provided with mechanical ducted ventilation.
- Floor drains, metal grates shall be incorporated into the dining area with the floor sloped to drain 30 mm per 1000 mm minimum.
- Trench type with metal grate floor drains shall be installed in the kitchen, food prep, cooking area and dishwashing area.
- Central cooking and food prep area shall be provided.
- Provide 1.6mm (16 gauge) stainless steel, or 4cm marble, pass through counter tops at the two openings between the kitchen and dining area.
- Design a floor mounted large washbasin designed for washing very large pots with a low rim/curb height.
- A grease trap will be provided to collect grease from the entire kitchen area prior to discharging waste water into the sewer line.

- Provide three latrines (Eastern Style with a wall mounted faucet and spray hose), one for DFAC staff and the others for male and female diners. Design minimum of 2 toilets and sinks for DFAC staff, 4 toilets and sinks for male diners, and 1 toilet and sink for female diners. The entrance to the DFAC staff latrine shall be from the kitchen area and the entrance to the diners shall be from the main entrance of the DFAC. The contractor is to orient the latrines in such way that all toilets face North/South.
- Provide tables and chairs to seat 375 persons (indicate seating layout on defac plan)
- Provide minimum ten (10) hand washing sinks at the inside of the main entrance to the DFAC. Each shall be constructed with poured in place concrete with ceramic tile exterior and lining capable of withstanding abuse. The hand washing stations and latrines shall be separate rooms.
- Provide Dry Storage room sized to carry 2 weeks worth of food.
- Provide a fenced trash collection point and trash cans in vicinity of DFAC rear door. Area shall be covered by a roof. Gate and fence shall be 2 meters high. Slope slab to drain and provide a 150 mm curb.

2.13 HSB AND ANA BAND COMPLEX

Design and construct a HSB and ANA Band complex consisting of the following: 3- "A" Type Barracks; 3-"B" Type Barracks; 3-Toilet/Shower Facilities (attached to barracks as shown on diagram); 1- HSB Headquarters Building (552m2); 1- HSB Storage/Arms Building; 1-ANA Band Office/Practice Hall/Storage Building.

Install built-in metal shelving inside the ANA Band Storage room. Provide three tier metal shelves around perimeter of band storage room, bottom shelf shall be 150 mm above finish floor, second and third shelf shall be 1000 mm apart, shelves shall be 800 mm wide.

The HSB Headquarters Building shall have one split type minimum 18,000 BTU cooling/heating units in each room. The Contractor shall calculate the heat gain load for each office room and provide the unit next in size to the calculated heat gain load. All rooms having an occupant load shall have ceiling mounted minimum 52-inch fans to conform with SECTION 01015 TECHNICAL REQUIREMENTS.

The HSB Storage/Arms Building shall have split type cooling/heating units in each office. The Contractor shall calculate the heat gain load for each office room and provide the unit next in size to the calculated heat gain load. No heating or cooling shall be installed in any other areas. The Arms Building shall conform to "Army Regulation 190-11."

The ANA Band Office/Practice Hall/Storage Building shall have split type cooling/heating units in each office. The Contractor shall calculate the heat gain load for each office room and provide the unit next in size to the calculated heat gain load. All rooms having an occupant load shall have ceiling mounted minimum 52-inch fans to conform with SECTION 01015 TECHNICAL REQUIREMENTS.

2.14 SB VEHICLE MAINTENANCE COMPLEX

2.14.1 HSB VEHICLE MAINTENANCE FACILTY, FUEL POINT, AND POL STORAGE BUILDING Supplement existing designs as required and construct a HSB Vehicle Maintenance Facility consisting of the following: 6-bay Maintenance Garage (approx 1,000m2); 10 vehicle wash racks; fuel point and POL Storage Building. Only the offices shall have split type minimum 18,000 BTU cooling/heating unit in each room. The Contractor shall calculate the heat gain load for each office room and provide the unit next in size to the calculated heat gain load. Contractor shall install crane systems as per drawing in Appendix C.

2.14.2 500 VEHICLE MOTOR POOL

Construct a 500 vehicle motor pool. Motor pool shall be gravel, compacted and set to a thickness to comply with SECTION 01015 TECHNICAL REQUIREMENTS.

2.15 G-2 COMPLEX

Design and construct a G-2 complex consisting of the following: 2- BOQs (Design for 2 of the rooms to have private bathrooms in each BOQ); 1-Common Toilet/Shower Facility (attached to BOQs as shown on diagram); 1- G-2 Main Staff Building (approx 1100m2); 1- G-2 Training and Classroom Building. Provide heating and cooling with split type cooling/heating units conforming to SECTION 01015 TECHNICAL REQUIREMENTS.

The G-2 Main Staff Building shall have a minimum 18,000 BTU split type cooling/heating unit in each office room. The Contractor shall calculate the heat gain load for each office room and provide the unit next in size to the calculated heat gain load. The classrooms, conference rooms, and any other rooms shall have ceiling mounted minimum 52-inch fans to conform with SECTION 01015 TECHNICAL REQUIREMENTS.

The G-2 Training Classroom Building shall have a split type cooling/heating unit in each office room. The Contractor shall calculate the heat gain load for each office room and provide the unit next in size to the calculated heat gain load. The classrooms, conference rooms, and any other rooms shall have ceiling mounted minimum 52-inch fans to conform with SECTION 01015 TECHNICAL REQUIREMENTS.

Demolish existing masonry walls, remove metal racks from field and fill and grade to drain. Design and construct a chain link fence around the G-2 Main Staff and Training/Classroom Building with chain link fence gate at the entrance as shown on diagram. The chain link fence shall be a minimum of 3 meters above finish grade to top of concertina wire. All foundations shall extend below frost line. Concertina wire shall be double 45 degree outriggers on top of fence posts with 3 strands of 14 gage barbed wire on each side and a center concertina wire.

OPTION ITEMS:

3.1 BACHELOR OFFICER QUARTERS

Design and construct additional Bachelor Officer complex on the G-2 complex area consisting of the following: 2-BOQs (Design for 2 of the rooms to have private bathrooms in each BOQ); 1-Common Toilet/Shower Facility (attached to BOQs as shown on diagram).

The BOQs shall have a split type minimum 18,000 BTU cooling/heating unit in each office room. The Contractor shall calculate the heat gain load for each office room and provide the unit next in size to the calculated heat gain load. In open areas, cooling shall be ceiling mounted minimum 52-inch fans as to conform with SECTION 01015 TECHNICAL REQUIREMENTS.

3.2 DEMO ADDITIONAL BUILDINGS AND STRUCTURES

Demolish additional structures as outlined in the diagram with 'X'. Contractor is responsible for clearing and hauling all construction debris to approved location inside the compound to be determined by the COR. In addition, contractor will demolish and remove the underground tanks located at the former vehicle maintenance area on the west side of the compound.

3.3 CENTRALIZED COMMUNICATIONS HUB AND UNDERGROUND COMMUNICATION CONDUITS 3.3.1 CENTRALIZED COMMUNICATIONS HUB

The renovation shall consist of exterior repairs, roof repairs, interior repairs, painting, new lighting, RJ45 jacks, and electrical upgrades. This will include related street paying, and walks. The building will require replacement windows and doors. The communications hub building shall be renovated with a central switch/uninterruptible power supply (UPS) room, office, and storage area. A concrete pad shall be poured outside the UPS room to hold a backup power generator with an adjacent concrete pad with a spill dike for designed fuel tank. Install and integrate a 50kW stand-by fuel generator, a generator fuel tank, an automatic transfer switch, and a main distribution panel for the entire communication building. The stand-by fuel generator shall supply power to entire communications hub. The fuel tank shall be sized to provide fuel for running 200 amp service for a period of 24 hours. A 15cm diameter or larger conduit shall connect the generator to the UPS room and shall use long sweep elbows totaling no more than 180 degrees for any bends. The facility will serve as the installation's center for telecommunications, switching, and automation networking (including internet service) and shall have year-round climate control for the sensitive electronic equipment. Central switch/UPS room shall consist of four 18,000 BTU split type cooling/heating units. Designated office shall consists of two 18,000 BTU split type cooling/heating unit. Power equivalent to 200 amp service at 220vac 50 Hz shall terminate in the UPS room for power distribution to the equipment racks and climate control system. A grounding grid tested to 5 ohms or less shall be distributed throughout the UPS and equipment rooms.

3.3.2 UNDERGROUND COMMUNICATION CONDUITS

The communications building shall have three inch underground conduit going to each facility requiring communications. These facilities are the DFAC, HSB HQ, ANA Band Office, G-2 Admin Building, G-2 Main Staff Building, G-2 Classroom/Training Building, Fire Station, Rec Center, and DPW. All conduits will have pull wires. Manhole/hand hole systems shall have no more than 150 meters between access points. All voice telephone wiring, data, and wiring, including any planned or future fiber optical runs, will originate and/or terminate in the communications hub building. All facilities requiring communications capability shall have a communication room to house all telephone and computer network equipment and all distribution boxes shall be routed to the communications room.

3.4 COMMUNICATIONS TOWER

Design and construct a 40m self-supporting tower next to the communications hub building. A 2.5m cable tray will connect the tower to the communications hub building. The communications hub building, tower, and cable tray will be connected to a single point grounding system. Communications Tower design and construction shall conform to SECTION 01015 TECHNICAL REQUIREMENTS.

3.5 FIRE STATION

Design and construct a Fire Station for 15 person capacity. Design shall consists of an open bay garage with capacity for three full size fire trucks, two storage rooms, one office, one classroom, dining room, kitchen, living room, bathroom, laundry room, bedroom for staff of twelve, and bedroom for three officers. The entire fire station shall be approx 600 m2. Design can be either one or two stories. All rooms excluding the garage shall have 18,000 BTU split type cooling/heating units to conform to SECTION 01015 TECHNICAL REQUIREMENTS.

3.6 RUNNING TRACK AND SOCCER FIELD

Design and construct a 400 meter asphalt running track with grass soccer field and two goal posts inside. The running track and soccer field area shall have stadium lighting to conform to SECTION 01015 TECHNICAL REQUIREMENTS.

3.7 GYM / AUDITORIUM

Design and construct a pre-engineered metal building to function as a gym and auditorium with at least one office, one male latrine, one female latrine, and one storage room of about 14 m2 each at one end of building. The entire building shall be approx 1600 m2. The minimum clear ceiling height shall be five (5) meters. There will be a mop sink and water in the storage room and freeze proof hose bibs outside. Include all electric, heating, ventilation, and related items. The offices shall have one a split type minimum 18,000 BTU cooling/heating unit in each office room. The Contractor shall calculate the heat gain load for each office room and provide the unit next in size to the calculated heat gain load. In open areas, cooling shall be ceiling mounted minimum 52-inch fans as to conform with SECTION 01015 TECHNICAL REQUIREMENTS

3.8 G-2 COMMAND ADMIN BUILDING

Renovate the G-2 Command Admin Building. The renovation shall consist of exterior repairs, roof repairs, interior repairs, painting, new lighting, electrical and plumbing upgrades. The G-2 Admin Building shall have split type minimum 18,000 BTU cooling/heating units for each room. This will include related street paving, walks, and support facilities. The building will require replacement windows and doors.

3.9 PUBLIC WORKS BUILDING

Renovate the Public Works Building. The renovation shall consist of exterior repairs, roof repairs, interior repairs, painting, new lighting, electrical and plumbing upgrades. The Public Works Building shall have split type minimum 18,000 BTU cooling/heating units for all offices and conference rooms. This will include related street paving, walks, and support facilities. The building will require replacement windows and doors.

3.10 RECREATION CENTER, LIBRARY, AND MARKET BUILDING

Renovate the Recreation Center, Library, and Market Building. The renovation shall consist of exterior repairs, roof repairs, interior repairs, painting, new lighting, electrical and plumbing upgrades. The Building shall have split type minimum 18,000 BTU cooling/heating units for all rooms. This will include related street paving, walks, and support facilities. The building will require replacement windows and doors.

3.11 LAUNDRY BUILDING

Design and construct a building be an open bay facility approximately 300 m2 with a mechanical room with water tanks and a receiving and pickup area. Furnish and install separate 100 m2 of outside clothes drying concrete patio area. Install 1 meter high masonry or concrete plumbing chase walls with a concrete or masonry cap at perimeter of cloths drying patio. Provide and install multiple rust-resistant outdoor cloths hanging rods attached to vertical painted or galvanized support poles at either end. Put similar cloths hanging poles inside building. Design 40 large commercial grade sinks to include integral washboards. Install two long hand ringer bars made of 1 inch diameter t-shaped galvanized bar (or similar) material as shown on diagram. Faucets shall be industrial grade with foot lever controls. All doors will be commercial doors. Countertop shall be plastic laminate with open shelving millwork below countertops. Provide an area to for future commercial grade washer and dryers to include electrical capability, piping, and vent pipes. The Laundry Building shall have split type minimum 18,000 BTU cooling/heating units. Cooling shall be ceiling mounted minimum 52-inch fans as to conform with SECTION 01015 TECHNICAL REQUIREMENTS

3.12 SWIMMING POOL

Renovate the Swimming Pool. The renovation shall consist of all surfaces including plumbing upgrades. This will include related street paving, walks, and support facilities. The swimming pool shall have new recirculation system with pumps, piping, filters, and water treatment to conform to SECTION 01015 TECHNICAL REQUIREMENTS.

3.13 BUNKER

Renovate existing bunker building to be used for storage area.

Note: These design notes are intended to aid in preparation of design documents for new facilities and supplement the design of those facilities that have been previously constructed at other Garrisons in Afghanistan.

--- End of Section ---

SECTION 01011

DESIGN CONCEPT DOCUMENTS

PART 1 - GENERAL

1.1 GENERAL

This section identifies documents issued with this RFP which establish the concept or basis for the project design. These requirements are minimum standards and may be exceeded by the Offeror. Deviations from these concepts and standards may be approved if considered by the Government to be in its best interests.

The extent of development of these requirements in no way relieves the successful Offeror from the responsibility of completing the design, construction documentation, and construction of the facility in conformance with applicable criteria and codes.

1.2 ENGINEERING AND DESIGN CRITERIA

General design requirements are set forth in this RFP herein. The Specifications Division 02 through 16 are the primary specifications criteria for the design and construction of the project. No design criteria will be furnished by the Afghanistan Engineer District except that which may be required for design and is not available from commercial sources or from the Construction Criteria Base (CCB) or 'Techinfo' website located at http://www.ccb.org/docs/ufgshome/UFGSToc.htm. The CCB must be obtained by the A/E if the criteria is required or desired. All design, unless otherwise specified, shall be based on nationally recognized industry standard, criteria, and practice.

1.3 APPENDIX DOCUMENTS

See Appendices for further technical requirements, criteria and parameters that are a part of this contract.

1.4 SPECIFICATIONS

Specifications included herein shall be utilized as design criteria and minimum standards for the corresponding construction work. The successful offeror shall develop complete construction specifications using the criteria included in these specifications.

The Government will provide Division 1 specifications sections 00600, 00700, 00800, and sections 01440 through 01700, to the successful offeror; and these sections shall be included in the final construction specifications without change. The DB Contractor shall furnish these specifications on electronic media for the production of construction specifications when requested. These specifications shall be submitted together with other required contractor prepared project construction documents during the Second Design Submittal of the Design Phase, Part II.

1.5 ORDER OF PRECEDENCE

In case of conflict, duplication, or overlap of design criteria specified in the documents referenced in this section, the following order of precedence shall be followed:

- 1. Drawings.
- 2. General written design requirements within RFP narrative.

3. General guidance from referenced publications herein.

1.6 MANDATORY CRITERIA

Portions of the design criteria documents provide mandatory criteria. Mandatory criteria consists of drawings, schematics, specifications, and other requirements which shall not be altered or modified for proposal submittal or subsequent final design except for minor adjustments for coordination or except for cost reduction proposals as specified in Section 00150 - THE DESIGN BUILD PROCESS. Non mandatory criteria shall be considered minimum requirements and may be enhanced, improved, or substituted to better suit design requirements or to improve evaluation consideration. Mandatory requirements are as listed below. All other design criteria shall be considered non mandatory.

Work Plan
Boundary survey plan
Topographic survey plan
Any mandatory criteria referenced within Project Program.
Any other criteria listed herein which is listed, shown or implied as mandatory.

1.7 ADDITIONAL DOCUMENTS/CRITERIA FURNISHED BY THE GOVERNMENT

The following documents will be furnished to the Design/Build Contractor when requested by the Offeror or Contractor:

Design Criteria published by the Government such as Technical Manuals (TM), Engineer Manuals (EM), Engineer Technical Letters (ETL) and other documents related to the design referenced herein which are not available on the Internet or in the Construction Criteria Base CD-Rom.

Commercial design criteria and specifications will not be furnished by the Government.

Conversion of electronic media to other formats shall be the responsibility of the Design Build Contractor.

PART 2 - PRODUCTS (NOT APPLICABLE)

PART 3 - EXECUTION (NOT APPLICABLE)

END OF SECTION

SECTION 01015

TECHNICAL REQUIREMENTS

1.0 GENERAL

1.1 GENERAL PROJECT DESCRIPTION

This project consists of a site master plan, site/UXO clearance, demolition, design/construction of prime power plant, water system, sewer system, site drainage, buildings, perimeter wall, gates, parking areas, roads, and building renovations, as defined in Section 01010 SCOPE OF WORK and shall be executed in accordance with the following requirements. All work in this contract shall be constructed at Bala Hissar in Kabul, Afghanistan.

1.2 DESIGN-CONSTRUCT OBJECTIVES

The Contractor's design and construction must comply with technical requirements contained herein. The Contractor shall provide design and construction using the best blend of cost, construction efficiency, system durability, ease of maintenance and environmental compatibility. Life expectation for this facility is for twenty (20) years. Material and methods used for this project must meet this design requirement. Any time two or more statements in RFP, are in conflict; the most stringent shall apply.

1.3 DESIGN FLEXIBILITY

These design and product requirements are minimum requirements. The Contractor is encouraged to propose alternate design or products (equipment and material) that are more commonly used in the region; will be equally or more cost effective or allow for more timely completion, but must furnish the same function, system durability, ease of maintenance and environmental compatibility. The Contractor will be required to submit information as requested by the Contracting Officer to make a comparison of the proposed alternate. All variations must be approved by the Contracting Officer.

1.4 ASBESTOS CONTAINING MATERIALS

Asbestos containing material (ACM) will not be used in the design and construction of this project. If no other material is available which will perform the required function or where the use of other material would be cost prohibitive, a waiver for the use of asbestos containing materials must be obtained from the Contracting Officer.

1.5 LIMIT OF WORK SPACE

The Contractor shall, except where required for service connections or other special reasons confine his operations strictly within the boundaries of the site. Workmen will not be permitted to trespass on adjoining property. Any operations or use of space outside the boundaries of the site shall be by arrangement with all interested parties. It must be emphasized that the Contractor must take all practical steps to prevent his workmen from entering adjoining property and in the event of trespass occurring the Contractor will be held entirely responsible.

1.6 TEMPORARY STRUCTURES

The Contractor shall erect suitable temporary fences, lighting, and necessary structures to safeguard the site, materials and plant against damage or theft and for the protection of the general public and shall adequately maintain the same throughout the course of the contract. All utility costs to support temporary structures during the contract period of performance shall be paid by the Contractor.

As outlined in Section 01010, Scope of Work, there will be beneficial occupancy (in the DFAC and G-2 Complex) once the DFAC and G-2 Complex are completed as part of Phase I. Therefore, the Contractor shall provide temporary power, water, and sewer capabilities to the DFAC and G-2 Complex while remaining construction on-site continues if necessary.

1.7 SUBCONTRACTORS

Compliance with the provisions of this section by subcontractors will be the responsibility of the Contractor.

1.8 SCOPE OF WORK

The scope of work for each discipline is stated in Section 01010, SCOPE OF WORK.

1.9 LOCAL MATERIALS and LABOR

Intent of the project is to use locally procured materials and labor to the maximum extent.

1.10 SAFETY

1.10.1 UNEXPLODED ORDNANCE

The requirements of this clause are in addition to and supplement EM 385-1-1 U.S. Army Corps of Engineers Safety and Health Requirements Manual.

1.10.1.1 UXO/mine Discovery During Project Construction

It is the responsibility of the Contractor to be aware of the risk of encountering UXO and to take all actions necessary to assure a safe work area to perform the requirements of this contract. If after the entire site has been cleared of UXO/mines per the International Mine Action Standards (IMAS) and clearance is done to the anticipated foundation depth, the Contractor becomes aware of or encounters UXO or potential UXO during construction, the Contractor shall immediately stop work at the site of the encounter, move to a safe location, notify the COR, and mitigate any delays to scheduled or unscheduled contract work. The Contractor shall remove and dispose of UXO's per the International Mine Action Standards (IMAS). These standards can be found at http://www.mineactionstandards.org. The Contractor assumes the risk of any and all personal injury, property damage or other liability, arising out of and resulting from any Contractor action hereunder. In these cases the contractor shall be required to identify and dispose of the ordnance.

1.10.1.2 Explosives Safety

1.10.1.2.1 General Safety Considerations

General safety considerations applicable to personnel, both essential and non-essential, at project sites where UXO may be encountered include:

- a. Do not carry fire or spark-producing devices.
- b. Do not conduct explosive or explosive-related operations without approved procedures and proper supervision and UXO safety support.
- c. Do not become careless by reason of familiarity with UXO or the reported probability level of UXO contamination.
- d. Do not conduct explosive or potentially explosive operations during inclement weather.
- e. Avoid contact with UXO except during UXO clearance operations.
- f. Conduct UXO-related operations during daylight hours only.
- g. Employ the "buddy system" at all times.

1.10.1.2.2 Activity Hazard Analysis (AHA) Briefings

- a. Activity Hazard Analysis's shall be prepared in accordance with the Corps of Engineers Safety and Health Requirements Manual, EM 385-1-1.
- b. Hazard analyses will be prepared and briefed by personnel that are knowledgeable in UXO and explosives safety standards and requirements. These personnel should understand the specific operational requirement and hazard analysis methodologies. A hazard analysis will be performed for each activity to determine the significance of any potential explosive-related hazards. Explosive residues may be discovered or exposed during UXO operations in the

form of powder or various granular and powder based pellets. These contaminants can enter the body through the skin or by ingestion if proper personal hygiene practices are not followed. Explosive fillers such as white phosphorus are dangerously reactive in air and acute exposure can result in serious injury to the skin, eyes, and mucous membranes. They are also a fire hazard.

Safety requirements (or alternatives) that will either eliminate the identified hazards, mitigate or control them to reduce the associated risks to an acceptable level will be developed. The adequacy of the operational and support procedures that will be implemented to eliminate, control, or abate identified hazards or risks will then be evaluated and a second risk assessment completed to verify that a satisfactory safety level has been achieved.

1.10.1.3 Notification of Noncompliance

The Contractor of Silver will notify the Contractor of any detected noncompliance with the foregoing requirements. The Contractor shall take immediate corrective action after receipt of such notice. Such notice, when delivered to the Contractor at the work site, shall be deemed sufficient for the purpose of notification. If the Contractor fails or refuses to comply promptly, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. The Contractor shall make no part of the time lost due to such stop orders the subject of claim for extension of time or for excess costs or damages.

1.11 ORIGINAL PERFORMANCE CRITERIA

Unless otherwise indicated (by design calculations, standard engineering practice, or specific reference), the Contractor shall design and build renovations to obtain original performance criteria (i.e., products and craftsmanship shall be similar in quality, durability, ease of maintenance, and physical characteristics to the new building components and systems).

1.12 SURVEY AND MAPPING

General Work to be performed – Conduct topographic survey and mapping of the project site to include any existing and/or associated utilities, hydrological, geological, botanical or other physical conditions that could impact on design. Assume survey mapping and topographical maps are not obtainable. If any are existing and can be used, their accuracy shall be verified. Topographic survey data shall include horizontal and vertical (H&V) controls.

1.12.1 Survey Requirements

1.12.1.1 Horizontal and Vertical Control

The mapping shall be based on the base coordinate system. If the base system cannot be found, the surveyor shall use any established monuments. If monuments have been destroyed or do not exist an assumed horizontal and vertical datum shall be established, using arbitrary coordinates of 10,000n and 10,000e and an elevation of 1,000 meters. The horizontal and vertical control established on site shall be a closed loop with third order accuracy and procedures.

- 1.12.1.2 Provide three (3) concrete survey monuments at the survey site.
- 1.12.1.3 All of the control points established at the site shall be plotted at the appropriate coordinate point and shall be identified by name or number, and adjusted elevations.

1.12.2 Topography Requirements

- 1.12.2.1 A sufficient quantity of horizontal and vertical control shall be established to provide a detailed topographic survey at 1:200 scale with (25) centimeter contour intervals. Intermediate elevations shall be provided as necessary to show breaks in grade and changes in terrain.
- 1.12.2.2 The contours shall accurately express the relief detail and topographic shapes. In addition, 90 percent of the

elevations or profiles interpolated from the contours shall be correct to within one-half of the contour interval and spot elevations shall be correct within plus or minus 2 centimeters.

- 1.12.2.3 Spot elevations affecting design of facilities shall be provided. Specifically, break points or control points in grades of terrain such as tops of hills, bottoms of ditches and gullies, high bank elevations, etc.
- 1.12.2.4 All surface and sub-surface structures features within the area to be surveyed shall be shown and identified on the topographic maps. In addition, these features shall be located by sufficient distance ties and labeled on the topographic sheets to permit accurate scaling and identification.

$1.13~\rm MEASURED$ DRAWINGS, VERIFICATION OF EXISTING CONDITIONS, AND DESIGN DOCUMENTATION

1.13.1 The Contractor shall survey and produce detailed documentation of the site utilities, buildings, and systems for the entire compound. Contractor shall perform detailed building measurement as needed to verify available printed and electronic documentation. Drawings shall clearly distinguish existing conditions from renovation work performed under this contract. Documentation work shall be performed on computer assisted design and drafting (CADD). New documentation shall be performed on AutoCAD version 2004, conforming to A/E/C Tri Services standards. Units shall be metric. Language for all documents shall be in American English.

1.14 DESIGN PRODUCTS

1.14.1 General

The following are contract deliverables which expound upon and finalize the Design parameters/requirements outlined within the contract documents. They shall be prepared in such a fashion that the Prime Contractor is responsible to the Government and not as an internal document between the Prime Contractor and its Sub Contractors, Vendors, Suppliers, etc.

1.14.2 Design Analysis

The design analysis should be written in the English Language for review by the Government for all buildings (new and remodeled). Each building shall be listed as indicated in Section 01010. The design analysis is a written explanation of the project design which is expanded and revised (updated) as the design progresses. The design analysis shall contain all explanatory material giving the design rationale for any design decisions which would not be obvious to an engineer reviewing the final drawings and specifications. The design analysis contains the criteria for and the history of the project design, including criteria furnished by the Government, letters, codes, references, conference minutes, and pertinent research. Design calculations, computerized and manual, are included in the design analysis. Narrative descriptions of design solutions are also included. Written material may be illustrated by diagrams and sketches to convey design concepts. Catalog cuts and manufacturer's data for all equipment items, shall be submitted. Copies of all previous design phase review comments and the actions assigned to them shall be included with each submission of the design analysis. Specific requirements for the design analysis, listed by submittal phase, are contained hereinafter. Provide Code Analysis for each building based on the following items and code sections.

Code Analysis

The following analysis information is required for all buildings submitted in this proposal. List: Seismic Design Category, Wind Speed, and Snow Load.

Analysis Items Code References – International Building

Code (IBC) 2003

1. Type of Construction IBC Chapter 6

2. Occupancy Classification IBC Chapter 3 and Table 302.3.2

3. Actual Allowable Area IBC 503, 505-508 & Table 503

4. Actual Allowable Height IBC 504 & Table 503

5 Occupant Load (per use) IBC 1004 & Table 1004.1.2

6. Exits Required/Provided IBC 1004 & Table 1004.1.2

IBC 1014, 1018, and 1018.2

7. Required Opening Protection IBC Table 602

8. Fire Resistive Construction IBC Table 601

1.14.3 Design Calculations

When design calculations are voluminous, they shall be bound separately from the narrative part of the design analysis. The design calculations shall be presented in a clean and legible form incorporating a title page and index for each volume. A table of contents, which shall be an index of the indices, shall be furnished when there is more than one volume. The source of loading conditions, supplementary sketches, graphs, formulae, and references shall be identified. Assumptions and conclusions shall be explained. Calculation sheets shall carry the names or initials of the computer and the checker and the dates of calculations and checking. No portion of the calculations shall be computed and checked by the same person. Either the designer or the checker shall be a licensed engineer.

1.14.4 Specifications

Specifications shall be prepared in accordance with the Construction Specifications Institute (CSI) format. The Design-Build Contractor prepared specifications shall include as a minimum, all applicable specifications sections referenced by the CSI. Where the CSI does not reference a specification section for specific work to be performed by this contract, the Design-Build Contractor shall be responsible for creating the required specification. All materials specified shall use CSI Standards and shall be listed in Section 1.1 References of each Specification Section. It shall be the contractor's responsibility to show equivalency requirements are met if the Standard is not per (CSI) format.

1.14.4.1 Ambiguities and indefinite specifications

Ambiguities, indefinite specification requirements (e.g., highest quality, workmanlike manner, as necessary, where appropriate, as directed etc.) and language open to interpretation is unacceptable.

1.14.4.2 Industry Standards

The Codes, Standards, and Regulations listed below shall be used in the construction of this project. The publications shall be the most recent editions. Standards specified shall be ASTM or equivalent DIN, BS, or EN. Standards other than those mentioned may be accepted provided they meet the minimum requirements and the Contractor shall submit proof of equivalency to the Contracting Officer for approval. It shall be the contractor's responsibility to show equivalency requirements are met if the Standard is not per (CSI) format. Any time two or more standards conflict, the most stringent shall apply.

- (a) TI 800-01 Design Guide Corps of Engineers
- (b) IBC International Building Code (Latest Edition)
- (c) IPC International Plumbing Code (Latest Edition)
- (d) IMC International Mechanical Code (Latest Edition)
- (e) NFPA National Fire Protection Association.
- (f) ASME American Society of Mechanical Engineers.
- (g) AWS American Welding Society.
- (h) SMACNA Sheet Metal and Air Conditioning Contractors National Association.
- (i) ACI American Concrete Institute.
- (j) ASTM American Society of Testing Materials.
- (k) ACI 318, Building Code Requirements for Structural Concrete, (Latest Edition)
- (1) International Mine Action Standards, latest edition; see http://www.mineactionstandards.org for copy of standards.
- (m) NFPA 70, National Electrical Code, (Latest Edition)
- (n) NFPA 101 Life Safety 2005 code.

- (o) UFC-3-520-01 Interior Electrical Systems.
- (p) Army Regulation 190-11 For Arms Room.

The publications to be taken into consideration shall be those of the most recent editions. Standards other than those mentioned above may be accepted if the standards chosen are internationally recognized and meet the minimum requirements of the specified standards. The Contractor shall be prepared to submit proof of this if requested by the Contracting Officer.

Standards referenced shall be by specific issue; the revision letter, date or other specific identification shall be included. See individual sections for additional Codes and references required.

American codes/standards, etc., to include but not be limited to:

Minimum Design loads ANSI/ASCE 7-1995.

Concrete American Conc. Institute (ACI) 318-99

Structural Steel AISC MANUAL, 9th Edition

Masonry Technical Manual, TM5-809-3 (working stress)

Seismic IBC Seismic Design for Buildings.

Crane System CMAA 70 & 74, Class C

Communication Tower EIA 222-F

1.15 OUALITY CONTROL AND TESTING

Specifications shall include required quality control and further indicate all testing to be conducted by the Design-Build Contractor, its Sub Contractors, vendors and/or suppliers.

1.16DRAWINGS

During the course of design, the designer shall specify specific proprietary materials, equipment, systems, and patented processes by trade name, make, or catalog number. The subsequent use of construction submittals to supplant and/or supplement incomplete design effort is unacceptable. Design submittals containing non-proprietary and/or generic design criteria where proprietary items are available, will be returned for resubmission. All drawings shall be in AutoCAD 2005 or later version.

1.17 LIMITATION OF WORKING SPACE

Contractor shall, except where required for service connections or other special reasons confine his operations strictly within the boundaries of the site. Workmen will not be permitted to trespass on adjoining property. Any operations or use of space outside the boundaries of the site shall be by arrangement with all interested parties. It must be emphasized that the Contractor must take all practical steps to prevent his workmen from entering adjoining property. The Contractor's employees shall not be allowed parking on the installation. The Contractor is responsible for transporting workers from off post to the worksite, coordinating security identification screening, and cooperating in gate searches with the base authorities.

1.18 IN PLACE CONSTRUCTION PAYMENT

No payment will be made for any in-place construction until all required submittals have been made, reviewed and are satisfactory to the Government.

1.19 COMMENCEMENT OF CONSTRUCTION

Work may begin after receipt of the clearance for construction (Notice to Proceed) (NTP).

1.20 EXCAVATION

1.20.1 Trench excavation shall be made for site utilities and miscellaneous work. Trenches shall be a minimum of 0.8 meters deep. Trenches deeper than 1.5 meters shall have protective shoring to protect workers, or have the sides of the trench lain back at a slope of 1.5:1.

- 1.20.2 Care shall be taken when backfilling of trenches to avoid damage to installed utilities and materials.
- 1.20.3 All excess dirt, brick, and clean fill shall be used as fill on site along bank North of Gym/Auditorium.

1.20.4 Roads

Paved roads are required within the entire Site. Most existing roads are paved asphalt in poor condition. All roads shall be constructed with a new wearing surface 7.3 meters wide, graded for proper drainage, provided with necessary drainage structures and completed with prescribed surfaces in accordance with applicable sections of TM 5-822-2 and TM 5-822-5 standards. The road sections shall have a 50 mm AC Pavement wearing surface, over a 150 mm aggregate base course. The base course shall be applied over 300 mm scarified sub grade, compacted to 95% proctor density. Degree of compaction shall be expressed as a percentage of the maximum density obtained by the test procedure presented in ASTM D 1557or equivalent DIN, BS, or EN standards. Contractor shall notify the Contracting Officer immediately if initial site survey determines that area hydrology requires major drainage structures. Also, the Contracting Officer shall be immediately notified if the required lengths of road or preexisting conditions are determined to be substantially or materially different than the above-described conditions/estimates.

2.0 WATER

Provide an evaluation for the provision of water to the Compound. The evaluation shall address the development of a well and new water supply system.

2.1 General

Design and construct a new water supply system to include raw water source to support 1500 persons. Design and construct a deep well and water distribution system. The water system shall also include well pumps, pressure tank, chlorination, and water storage tank sized to serve 1500 personnel with one day of storage. The design of the water system shall use at least 150 liters per capita per day for pumping capacity and for storage. The water pressure tank is to be used to boost water pressure in the distribution. The deep well water pumps shall be able to produce at least 225,000 liters per day. The capacity of the water storage tank(s) shall be at least 225,000 liters. The entire water system shall be disinfected upon completion of work. The system shall not be accepted until satisfactory pressure and bacteriological test results have been obtained.

2.1.2 Water Quality Sampling and Analysis

The Contractor shall perform water quality sampling and testing at the source. The Contractor shall utilize well-qualified and equipped testing capability in the project site area, if available. If professional testing services are not available in the area, the Contractor shall submit an alternative practical testing source for approval. Raw water quality criteria for Water Quality and Criteria Standards, and shall address the following: PH, turbidity, conductivity, oxidation reduction potential, total dissolved solids, color, odor, total coli form/fecal coli form (bacteria) an indicator of the presence of E. coli. These baseline parameters are a partial list as presented in TM5-813-3/AFM 88-10 APPENDIX A.

2.1.3 Well House

At new wells, construct a permanent well house with concrete slab floor. The floor of the well house shall slope away from the casing approximately 2 cm per 30 cm (1/8" per foot). Floor of well house shall be above floodplain. The well house design should be such that the well pump, motor and drop pipe can be removed readily. The well house shall protect valves and pumping equipment plus provide freeze protection for the pump discharge piping beyond the check valve. The well house shall be insulated and a heating unit installed. The well shall be protected from unauthorized use by a security fence with lockable gate. Provide outriggers, barbed wire and concertina wire on fence and gate.

2.1.4 Raw Water Disinfection

Contractor shall perform disinfection of the well water in accordance with AWWA A 100 or equivalent. Bacteriological samples shall be collected and examined in accordance with Standard Methods for the Examination of Water and Wastewater by a qualified lab as approved by the Contracting Officer.

2.1.5 Service Booster Pumps – (Direct Pressure System Pending Engineering Site Investigation)

Contractor shall provide a booster pump station for pumping water storage into the main distribution system. The pumps and controls shall be designed to supply and maintain acceptable system pressure throughout the distribution network given the full range of flow conditions (low flow to peak). For conditions of low demand and to prevent short cycling of primary pumps, provide a low demand jockey pump with capacity of one-third (1/3) of the Average Daily Demand (ADD). Each booster pump, two (2), shall be capable of delivering 2 times (2x) the ADD. Provide suitable expansion tank. The suction side of the service booster pumps shall have an eccentric reducer and gate valve installed. The discharge side shall have a gate valve, check valve (between the pump and the gate valve and concentric reducer, pressure gage and air relief valve).

2.1.6 Water Storage Tank

Contractor shall provide a circular steel or circular concrete ground storage reservoir (GST) to be located on the ground surface. Volume of the GST shall be a minimum storage volume of a full days demand (225,000 Liters). Storage Reservoir shall be constructed and heated to prevent freezing of the tank and pipes entering tank. (heat wrapped tape and exterior tank insulation does not conform to Life expectation of twenty (20) years.) The Contractor shall verify storage volume requirements based on final design population. The storage facility shall be located above drainage areas and locations subject to flooding as approved by the Contracting Officer. The storage facility shall be located on the higher elevations of the site to promote gravity flow and reduce pumping requirements. Overflow and air vents shall be screened so that birds, insects, rodents and debris cannot enter the reservoir.

2.1.7 Disinfection & Chlorination System

Use hypochlorite compounds for disinfection. A hypo-chlorinator shall be used to feed a sodium hypochlorite solution of 5-15% available chlorine into the system. Hypochlorite compound may be a liquid or solid form. The hypo chlorination system shall consist of a chemical solution tank for hypochlorite, diaphragm-type pump, power supply, water pump, pressure switch and storage tank (optional hydro-pneumatic/storage). The pump shall feed a hypochlorite solution in proportion to the water demand. The hypo-chlorinator shall have a pumping rate, liters per day (lpd) (gallons per day (gpd)) adequate to deliver 5 percent (5%) available hypochlorite solution adjustable to the quantity of water being produced from the source. Dosage rate will vary somewhat depending on actual pump production rate and available residual chlorine in the system. Contractor shall determine the required dosage rate milligrams per liter (mg/l) to maintain the required chlorine residual (usually 0.2-0.4mg/l) in the distribution system. Chlorine solution tank shall be large enough to hold a three days' supply of hypochlorite solution. A fresh solution shall be prepared every two or three days because the solution may lose its strength over time and this will affect the actual chlorine feed rate. The hypochlorite shall be stored in a cool dry place. Sodium hypochlorite can lose from two to four percent of its available chlorine content per month at room temperature. Contractor shall verify required minimum residual chlorine in accordance with local requirements verified and approved by the Contracting Officer. The chlorination system shall have the capability for manually adjusting the dosage rate and be installed in such a manner that the system can be easily disconnected and bypassed in the event of health safety or routine maintenance and repair. Disinfection of water mains shall be in accordance with AWWA standard C651-86 and disinfection of storage facilities in accordance with AWWA standard C652-86

2.1.8 Chlorine Building

Contractor shall furnish a building as per chlorine manufacturer's installation requirements. Provide building as required with lighting and heat.

2.2 WATER DISTRIBUTION SYSTEM

2.2.1 General

The Contractor shall provide a water distribution system described as follows: Pipe diameters used in the network shall be 300mm, 250mm, 200mm, 150mm and 100mm, as calculated, using ductile iron (DI) conforming to AWWA C151, installed in accordance with C 600 or polyvinyl chloride (PVC) as per ASTM D 1784 and 1785. All pipes and joints shall be capable of at least 1.03 MPa (150 psi) and 1.38 (200psi) hydrostatic test pressure unless otherwise specified. Pipes should be adequate to carry the maximum quantity of water at acceptable velocities 0.9 to 1.5m/sec (3 to 5 ft/sec) at maximum flows not to exceed 2.8m/sec (9.2ft/sec) with working pressures of 240kPa (35psi) to 350kPa (50psi). Minimum pressure is 140kPa (20psi) to all points of the distribution system and maximum pressure of 690kPa (75psi). If high pressures (greater than 690kPa) cannot be avoided, pressure-reducing valves shall be used. Water service connections to buildings shall vary from 19mm, 25mm or 38mm to 75mm, as calculated, depending on the usage requirement. Pipe service connections from the distribution main to the building shall be either Polyvinyl Chloride (PVC) plastic Schedule 80 ASTM D (PVC shall not be used above grade) 1785 or copper tubing conforming to ASTM B 88M, Type K, annealed. After choosing piping material type, use similar piping materials for all buildings for efficiency of future maintenance activities. The distribution network shall be laid out in a combination grid and looped pattern with dead ends not exceeding 30m. Dead end sections shall not be less than 150mm diameter and shall either have blow off valves or fire hydrants (flushing valves) installed for periodic flushing of the line. Any pipe with a fire hydrant on the line shall be at least 150mm in diameter. Water supply distribution shall connect to a building service at a point approximately 1.5m outside the building or structure to which the service is required. Adequate cover must be provided for frost protection. A minimum cover of 80cm is required to protect the water distribution system against freezing. Water lines less than 1.25 meters deep under road crossings shall have a reinforced concrete cover of at least 150 mm thickness around the pipe.

2.2.2 Pipe

The Contractor shall provide pipe of adequate strength, durability and be corrosion resistant with no adverse effect on water quality. The exterior surface of the pipe must be corrosion resistant. If the pipe is installed underground pipe shall be encased with polyethylene in accordance with AWWA C105. Water distribution pipe material shall be PVC or Ductile Iron (DI). Ductile iron pipe shall conform to AWWA C104, etal. DI fittings shall be suitable for 1.03MPa (150psi) pressure unless otherwise specified. Fittings for mechanical joint pipe shall conform to AWWA C110. Fittings for use with push-on joint pipe shall conform to AWWA C110 and C111. Fittings and specials shall be cement mortar lined (standard thickness) in accordance with C104. Polyvinyl Chloride (PVC)pipe shall conform to ASTM D 1785. Plastic pipe coupling and fittings shall be manufactured of material conforming to ASTM D 1784, Class 12454B. PVC screw joint shall be in accordance with ASTM D 1785, et al, Schedules 40, 80 and 120. PVC pipe couplings and fittings shall be manufactured of material conforming to ASTM D 1784, Class 12454B. Pipe less than 80mm, screw joint, shall conform to dimensional requirements of ASTM D schedule 80. Elastomeric gasket-joint, shall conform to dimensional requirements of ASTM D 1785 Schedule 40, All pipe and joints shall be capable of 1.03Mpa (150psi) working pressure and 1,38Mpa (200psi) hydrostatic test pressure.

2.2.3 Hydrostatic, Leakage and Disinfection Tests

The Contracting Officer shall be notified not less than 48 hours in advance of any water piping test and will be given full access for monitoring testing procedures and results. Where any section of water line is provided with concrete thrust blocking for fittings or hydrants, tests shall not be made until at least 5 days after installation of the concrete thrust blocking, unless otherwise approved.

2.2.3.1 Pressure Test

After the pipe is laid, the joints completed, and the trench partially backfilled leaving the joints exposed for examination, the newly laid piping or any valved section of piping shall, unless otherwise specified, be subjected for 1 hour to a hydrostatic pressure test of 1.03 MPa (150psi). Each valve shall be opened and closed several times during the test. Exposed pipe, joints, fittings, hydrants and valves shall be carefully examined during the partially opened trench test. Joints showing visible leakage shall be replaced or remade as necessary. Cracked or defective pipe, joints, fittings, hydrants and valves discovered following this pressure test shall be removed and replaced and retested until the test results are satisfactory

2.2.3.2 Leakage Test

Leakage test shall be conducted after the pressure tests have been satisfactorily completed. The duration of each leakage test shall be at least 2 hours and during the test the water line shall be subjected to not less than 1.03 MPa (150psi). Leakage is defined as the quantity of water to be supplied into the newly laid pipe, or any valved or approved section, necessary to maintain pressure to within 34.5kPa (5psi) of the specified leakage test pressure after the pipe has been filled with water and the air expelled. Pipe installation will not be accepted if leakage exceeds the allowable leakage, which is determined by the following formula:

L = 0.0001351 ND (P raised to 0.5 power) L = Allowable leakage in gallons per hour N = Number of joints in the length of pipeline tested D = Nominal diameter of the pipe in inches P = Average test pressure during the leakage test, in psi gauge

Should any test of pipe disclose leakage greater than that calculated by the above formula, the defective joints shall be located and repaired until the leakage is within the specified allowance, without additional cost to the government.

2.2.3.3 Bacteriological Disinfection

2.2.3.3.1 Disinfection Procedure

Before acceptance of potable water operation, each unit of completed waterline shall be disinfected as prescribed by AWWA C651. After pressure tests have been completed, the unit to be disinfected shall be thoroughly flushed with water until all entrained dirt and mud have been removed before introducing the chlorinating material. Flushing will be performed in a manner and sequence that will prevent recontamination of pipe that has previously been disinfected. The chlorinating material shall be either liquid chlorine, calcium hypochlorite, or sodium hypochlorite. The chlorinating material shall provide a dosage of not less than 50 ppm and shall be introduced into the water lines in an approved manner. Polyvinyl Chloride (PVC) pipelines shall be chlorinated using only the above-specified chlorinating material in solution. The agent shall not be introduced into the line in a dry solid state. The treated water shall be retained in the pipe long enough to destroy all non-spore forming bacteria. Except where a shorter period is approved, the retention time shall be at least 24 hours and shall produce not less than 25 ppm of free chlorine residual throughout the line at the end of the retention period. Valves on the lines being disinfected shall be opened and closed several times during the contact period. The line shall then be flushed with clean water until the residual chlorine is reduced to less than 1.0 ppm. During the flushing period, each fire hydrant on the line shall be opened and closed several times.

2.2.3.3.2 Sampling

For each building connected to the water system, personnel from the Contractor's commercial laboratory shall take at least 3 water samples from different points, approved by the Contracting Officer, in proper sterilized containers and perform a bacterial examination in accordance with approved methods. The commercial laboratory shall be verified to be qualified by the appropriate authority for examination of potable water.

2.2.3.3.3 Acceptance Requirements

The disinfection shall be repeated until tests indicate the absence of pollution for at least 2 full days. The unit will not be accepted until satisfactory bacteriological results have been obtained.

2.2.3.3 Time for Making Tests

Except for joint material setting or where concrete thrust blocks necessitate a 5-day delay, pipeline jointed with rubber gaskets, mechanical or push-on joints, or couplings may be subjected to hydrostatic pressure, inspected and tested for leakage at any time after partial completion of backfill.

2.2.3.4 Concurrent Tests

The Contractor may elect to conduct the hydrostatic tests using either or both of the following procedures.

Regardless of the sequence of tests employed, the results of pressure tests, leakage tests, and disinfection shall be recorded for submission and approval. Replacement, repair or retesting required shall be accomplished by the Contractor at no additional cost to the Government. a. Pressure test and leakage test may be conducted concurrently, b. Hydrostatic tests and disinfection may be conducted concurrently, using water treated for disinfection to accomplish the hydrostatic tests. If water is lost when treated for disinfection and air is admitted to the unit being tested, or if any repair procedure results in contamination of the unit, disinfection shall be re-accomplished.

2.2.4 Valves

Valves (Gate valves w/box) shall be placed at all pipe network tees and cross intersections and the number of valves shall be one less than the number of lines leading into and away from the intersection. For isolation purposes valves shall be spaced not to exceed 300m. Gate valves shall be in accordance with AWWA C 500 and/or C509. Butterfly valves (rubber seated) shall be in accordance with C504 etal. The valves and valve boxes shall be constructed to allow a normal valve key to be readily used to open or close the valve. Provide traffic-rated valve boxes. Provide concrete pad, 1 meter square, for all valve boxes.

2.2.5 Vacuum and Air Release Valves

Air release valves are required to evacuate air from the main high points in the line when it is filled with water, and to allow the discharge of air accumulated under pressure. Vacuum relief valves are needed to permit air to enter a line when it is being emptied of water or subjected to vacuum. Contractor shall submit manufacturer's data for properly sized combination air and vacuum release valves and determine their locations on the distribution system subject to review and approval of the Contracting Officer.

2.2.6 Blow-off valves

The Contractor shall provide 40-50mm blow-off valves at ends of dead end mains. Valves should be installed at low points in the mains where the flushing water can be readily discharged to natural or manmade drainage ditches, swales or other.

2.2.7 Thrust Blocking

Contractor shall provide concrete thrust blocking at any point where the layout of the system changes the direction of the flow, increases the velocity, or decreases or stops the flow. At these points, the pipes and fittings must be anchored and kept from moving or pulling apart by the use of thrust blocks installed against undisturbed earth.

3.0 SANITARY COLLECTION AND TREATMENT SYSTEM

3.1 General

Design and construct complete sanitary sewer collection and treatment system that includes, but is not limited to piping, connections, oil water separators, access manholes, cleanouts, treatment tanks and lagoons to support 1500 personnel. System shall be designed to connect to city sewer in the future. Replace all sewer lines into existing buildings, demolish all existing sewer lines, tanks, manholes, etc, back fill and compact to 95%. Exterior sanitary sewer line construction shall include service to all buildings on site. Construction required shall include appurtenant structures and building sewers to points of connection with all buildings, existing and new, to which the sewer system is to be connected. New sewage collection systems shall be designed and constructed in accordance with the International Plumbing Code and installation requirements. Field surveys shall be performed. Sanitary sewers less than 1.25 meters under road crossings shall have reinforced concrete cover at least 150 mm thick around the pipe. Exterior sanitary sewer line construction shall include service to all buildings as described in the Scope of Work Section 01010 and noted Section 01015. Contractor shall design sanitary sewer collection system using approved field survey data and finished floor elevations. Depending upon the topography and building location, the most practical location of sanitary sewer lines is along one side of the street. In other cases they may be located behind buildings midway between streets. Main collection sewers shall follow the most feasible route to the point of discharge. The sewer collection system shall be designed to accommodate an occupancy of 1500 persons. All sewers shall be located outside of the roadways as much as practical, and the number of roadway crossings shall be minimized. To the extent practical, a sewer from one building shall not be constructed under another building, or

remain in service where a building is subsequently constructed over it. Construction required shall include appurtenant structures and building sewers to points of connection to Building drains, (new and existing to which the sewer collection system is to be connected. The Contractor shall use the following criteria where possible to provide a layout which is practical, economical and meets hydraulic requirements: 1) Follow slopes of natural topography, 2) avoid routing sewers through areas which require extensive restoration or underground demolition, 3) Avoid areas of high groundwater and placement of sewer below the groundwater table, 4) locate manholes at change in direction, size or slope of gravity sewers, 5) use straight sections between manholes, curved alignment shall not be permitted, 6) locate manholes at intersections of streets where possible, 7) avoid placing manholes where the tops will be submerged or subject to surface water inflow, 8) evaluate alternative sewer routes where applicable, 9) verify that final routing selected is the most cost effective alternative that meets service requirements. In the event that facilities to be provided under the contract must be occupied prior to completion of permanent wastewater infrastructure, the Contractor will be responsible for providing temporary portable shower and bathroom facilities.

- 3.2 Protection of Water supplies The Contractor shall ensure that the sewer design meets the following criteria:
- 1. Sanitary sewers will be located no closer than 30m horizontally to water wells or reservoirs to be used for potable water supply.
- 2. Sanitary sewers will be no closer than 3m horizontally to potable water lines; where the bottom of the water pipe will be at least 305mm above the top of the sanitary sewer, horizontal spacing shall be a minimum of 1.8m.
- 3. Sanitary sewers crossing above potable water lines shall be constructed of suitable pressure pipe or fully encased in concrete for a distance of 2.7m on each side of the crossing. Pressure pipe will be as required for force mains in accordance with local standards and shall have no joint closer than 0.9m horizontally to the crossing, unless the joint is encased in concrete.

3.3 Quantity of Wastewater

The Contractor shall verify the average daily flow considering both resident (full occupancy) and non-resident (8hr per day) population. The average daily flow will represent the total waste volume generated over a 24-hour period, and shall be based on a population of 1,500 troops and water usage rate of 150 liters per capita day (water usage) equaling 225,000 liters per day. The wastewater flow rate shall be calculated as 80% of daily water use rate. Design criteria guideline shall be based on an average influent wastewater characteristic as BOD of 400mg/l, SS of 400mg/l, BOD load of 750ppd, and SS load of 750ppd.

3.3.1 Gravity Sewer

Sanitary sewers shall be designed to flow at 90 to 95 percent full. Sanitary sewer velocities shall be designed to provide a minimum velocity of 0.6 meters per second (mps) or 2.0 feet peer second (fps) at the ADD flow rate and a minimum velocity of 0.8 to 1.05 mps (2.5-3.5fps) at the peak diurnal flow rate. In no case shall the velocity drop below 0.3 mps, (1.0fps) to prevent settlement of organic solids suspended in the wastewater. Pipe slopes shall be sufficient to provide the required minimum velocities and depths of cover on the pipe. Unless otherwise indicated (see Building Connections and Service Lines), gravity sewer pipe shall be installed in straight and true runs in between manholes with constant slope and direction. Adequate cover must be provided for frost protection. A minimum cover of 80cm will be required to protect the sewer against freezing.

3.3.2 Manholes

The Contractor shall provide standard depth manholes (MH), (depth may vary) an inside dimension of 1.2 meters (4 feet). Manholes shall be made of cast-in-place reinforced concrete and shall taper to a 75cm (30-inch) cast iron frame that provides a minimum clear opening of 600mm (24 inches). In every case, the manholes, frames and covers shall be traffic rated, H-20 load rating. All manholes shall be provided with a concrete bench with a flow line trough, smoothly formed to guide waste flow to the outlet pipe from the inlet pipe(s). The top surface of the bench shall be above the crown of all pipes within the manhole. All surfaces of the bench shall be sloped smoothly toward the trough to guide flow, even under peak flow conditions.

3.3.3 Manhole Design Requirements

Manholes are required at junctions of gravity sewers and at each change in pipe direction, size or slope, except as noted hereinafter for building connections.

3.3.4 Spacing

The distance between manholes must not exceed 120m (400 ft) in sewers of less than 460mm (18 inches) in diameter. For sewers 460mm (18 inches) and larger, and for outfalls from wastewater treatment facilities, a spacing of up to 180m (600 ft) is allowed provided the velocity is sufficient to prevent the sedimentation of solids.

3.3.5 Pipe connections

The crown of the outlet pipe from a manhole shall be on line with or below the crown of the inlet pipe.

3.3.6 Pipe

Pipe shall conform to the respective specifications and other requirements as follows: Provide Polyvinyl Vinyl Chloride (PVC) conforming to ASTM D 3034, Type PSM with a maximum SDR of 35, size 380mm (15inch) or less in diameter. PVC shall be certified as meeting the requirements of ASTM D 1784, cell Class 12454 B.

3.3.6.1 Fittings

Fittings shall be compatible with pipe supplied and shall have a strength not less than that of the pipe. Fittings shall conform to the respective specifications and requirements as follows: provide PVC fittings conforming to ASTM D 3034 for type PSM pipe.

3.3.6.2 Joints

Joints installation requirements shall comply with the manufacturers installation instructions. Flexible plastic pipe (PVC or high density polyethylene pipe) gasketed joints shall conform to ASTM D3212.

3.3.6.3 Branch connections

Branch connections shall be made by use of regular fittings or solvent-cemented saddles as approved. Saddles for PVC pipe shall conform to Table 4 of ASTM D 3034.

3.3.6.4 Frames and Covers

Frames and covers shall be cast iron, ductile iron, traffic rated in any case to an H-20 load rating. Cast iron frames and covers shall be traffic rated, circular with vent holes.

3.3.6.5 Steps for manholes

Steps shall be cast iron, polyethylene coated, at least 15 mm (5/8 inch) thick, not less than 400mm (16 inches in width, spaced 300mm (12 inches) on center.

3.3.6.6 The minimum depth of cover over the pipe crown shall be shall 0.8m.

3.3.6.7 Building Connections and Service Lines

Building connections and service lines will be planned to eliminate as many bends as practical and provide convenience in rodding. Bends greater than 45 degrees made with one fitting should be avoided; combinations of elbows such as 45-45 or 30-60 degrees should be used with a cleanout provided. Connections to other sewers will be made directly to the pipe with standard fittings rather than through manholes. However, a manhole must be used if the connection is more than 31m from the building cleanout. Cleanouts shall be provided outside of the building.

Service connection lines will be a minimum of 100mm diameter and laid at a minimum 1% grade, but up to 2% as design parameters dictate. Service laterals shall be 150mm and sloped to maintain the minimum velocity as described in paragraph "Gravity Sewer."

3.3.6.8 Cleanouts

Cleanouts must be installed on all sewer-building connections to provide a means for inserting cleaning rods into the underground pipe. Install manufactured wye fittings. In lieu of a wye fitting, an inspection chamber may be installed. The inspection chamber shall be of the same construction as a manhole. Preferably the cleanout will be of the same diameter as the building sewer, and never be smaller than 100mm.

3.4 Field Quality Control

3.4.1 Field Tests and Inspections

- 1. The Contracting Officer will conduct field inspections and witness field tests specified in this section. The Contractor shall perform field tests and provide labor, equipment and incidentals required for testing.
- 2. Check each straight run of pipeline for gross deficiencies by holding a light in a manhole; it shall show a practically a full circle of light through the pipeline when viewed from the adjoining end of the line. When pressure piping is used in a non-pressure line for non-pressure use, test this piping as specified for non-pressure pipe.
- 3. Test lines for leakage by either infiltration tests or exfiltration tests. Prior to testing for leakage, backfill trench up to at least lower half of the pipe. When necessary to prevent pipeline movement during testing, place additional backfill around pipe to prevent movement during testing, but leaving joints uncovered to permit inspection. When leakage or pressure drop exceeds the allowable amount specified, make satisfactory correction and retest pipeline section in the same manner. Correct visible leaks regardless of leakage test results.
- 4. Infiltration tests and ex-filtration tests: Perform these tests for sewer lines made of specified material, not only concrete, in accordance with ASTM C 969M, ASTM C 969. Make calculations in accordance with the Appendix to ASTM C 969M, ASTM 969.
- 5. Low-pressure air tests: Perform tests as follows: 1) Concrete pipe: Test in accordance with ASTM C 924M, ASTM C 924. Allowable pressure drop shall be given in ASTM C 924M ASTM C 924. Make calculations in accordance with the Appendix to ASTM C 924M, ASTM C 924; 2) Ductile-iron pipe: Test in accordance with the applicable requirements of ASTM C 924M, ASTM C 924. Allowable pressure drop shall be as given in ASTM C 924M, ASTM C 924M, ASTM C 924, 3) PVC Plastic pipe: Test in accordance with applicable requirements of UBPPA UNI-B-6. Allowable pressure drop shall be as given in UBPPA UNI-B-6. Make calculations in accordance with the Appendix to UBPPA UNI-B-6.

3.5 Deflection Testing

Deflection testing will not be required; however, field quality control shall ensure that all piping is installed in accordance with deflection requirements established by the manufacturer.

3.6 Sewage Treatment

The Contractor shall design an Aerated Stabilization Pond to serve 1,500 personnel on a 24-hour basis. Basic general requirements for sewage aerated stabilization pond shall include the following:

3.6.1 The Contractor shall provide a reinforced concrete aerated stabilization pond treatment system with a nominal capacity (adjusted to 80% of 225,000 liters per day) of 180,000 liters per day ADD based on water usage rate of 150 liters per day per person operating 24 hours a day. The Contractor shall verify and adjust flow rate considering local customs and traditions. The Contractor shall coordinate the selection of the aerated stabilization pond design with the Contracting Officer through the submittal process. The selected aerated stabilization pond shall be capable of achieving a water quality effluent of less than or equal to 30mg/l Biochemical Oxygen Demand (BOD) and 30mg/l

Total Suspended Solids (TSS). The Contractor shall provide yard hydrants, hose and hose cabinet to facilitate the washing of the equipment. The aerated stabilization pond shall be equipped with a means of draining the system for maintenance. The Contractor shall insure that engineering, construction and maintenance is handled by experienced engineers, trained installers and qualified technicians, respectively. Individual equipment and every component shall be manufactured by manufacturers that have back-up spare parts in stock.

Dining Hall, Kitchen/mess facilities shall incorporate preliminary treatment with use of grease traps prior to the sewer collection system. Grease trap will connect to the sanitary sewer collection system.

Upon completion of the aerated stabilization pond installation, the Contractor shall check the system in the presence of the Manufacturer's Representative and Contracting Officer according to prescribed manufacturer's check procedures (O&M Manual). Upon clearance, the Contractor shall perform initial start up and initial operation, also in the presence of the MR and CO. The Contractor will operate the aerated stabilization pond for the contractual period performing all daily and weekly O&M tasks as recommended by the manufacturer's O&M Manual. The Contractor shall utilize the services of qualified operators, approved by the Contracting Officer, preferably trained Afghan Nationals, but imported specifically for that purpose, if necessary. During routine O&M, the Contractor shall perform all sampling and testing necessary to ensure proper daily operations and to optimize the system efficiency in achieving required effluent standards. During this performance period, the Contractor shall ensure that all prudent Log Records of daily O&M (repairs, inflow cycle, aeration cycles, effluent flow cycle and condition, etc.) are clearly, accurately and consistently recorded. The Contractor shall establish classroom training for USACE and Afghanistan National Army facility authorities and will establish long-term on-job-training (3 months) for three local Nationals with the goal to turn over O&M to their capable services at the end of the Contractor's period of performance.

3.6.2 Sludge Handling and Disposal (Reinforced concrete Sludge Drying Beds)

The Contractor shall prepare an operation and maintenance plan for the aeration operation and sludge removal and disposal. Drying of the sludge may take at least 12 weeks in the winter and 6 weeks in the summer. The operation and maintenance plan shall be submitted for Contracting Officer's review and approval.

3.6.3 Effluent Pond

The Contractor shall construct a holding pond out of reinforced concrete to receive the treated effluent. The pond shall have an over flow device. The purpose of the effluent pond is to allow for pumping of treated water into irrigation trucks for site watering and road dust control. Estimate size of the pond is approximately 100,000 gallons, not to exceed a depth of 3 feet. Aerated stabilization ponds process shall consider polishing ponds. Polishing ponds may be considered for the dual purpose quality effluent and irrigation. The polishing ponds will precede the chlorination prior to discharge at an approved discharge outfall location. Note that the treatment process consists of a series of ponds, primary and secondary cells, and the polishing pond.

3.7 SOLID WASTE MANAGEMENT AND DISPOSAL

3.7.1 General

The Contractor shall design and construct 3 collection point's, suitable for solid waste disposal temporary storage areas with 2 meter high fence and metal roof, enclosure shall have two metal gates in a 2 meter opening. Storage area shall be 3 meters X 3 meters with reinforced concrete slab and CMU walls. The Contractor shall prepare design plans showing location of collection points. Provide 3, indicate location on site plan.

The Contractor shall design and construct 1 collection point suitable for solid waste disposal temporary storage area adjacent to DFAC with 2 meter high fence and metal roof, enclosure shall have two metal gates in a 2 meter opening. Storage area shall be 4 meters X 4 meters with reinforced concrete slab and CMU walls. The Contractor shall prepare design plans showing location of collection point adjacent to DFAC. Provide next to hard surface road and 25 meters from DFAC.

4.0 ARCHITECTURAL

4.1 DOORS AND HARDWARE

- 4.1.1 Generally, Interior doors shall be wood, flush solid core, 90cm wide x 203cm high x 45mm thick with wood frames to match new door masonry openings. All glazed doors shall have 5mm tempered single glazing in the upper half of the door. Exterior doors shall be heavy gauge metal 90cm wide x 203cm high x 45mm thick all exterior doors shall have hollow metal frames. Commercial duty lock sets and hardware shall be used on all doors. Provide 3 hinges on all doors. Provide door handles and locksets that can be locked with a key on all doors. Provide heavy duty door closers on all exterior doors or where required by design analysis. Provide aluminum thresholds at all exterior doors. All door locks shall be operable from the inside such that no key is necessary to exit building. Coordinate the final keying schedule with Contracting Officer prior to ordering locksets. Hardware finish through shall be satin chrome or satin stainless. Generally each building should have 8 master keys fitting all locks, 8 submaster keys fitting all exterior doors and 3 keys each for each interior doors with lock. Include 25% spare key blanks for the amount of keys provided per building. Install tempered glazing in all doors with glazing. Provide numbering system identifying key to associated room door and install in locked metal key cabinet location per Contracting Officer. All glazing in or adjacent to doors shall be tempered per IBC
- 4.2.1 Provide horizontally sliding aluminum windows with factory baked finish in all buildings to fit the masonry openings. All windows shall be single 5mm glazed. Windows openings shall be provided with insect screening permanently fixed to the exterior. Provide a locking device on the interior of each window. Provide anchors on each side of the frame into the adjoining masonry, 3 on each side. Provide weather stripping system for all exterior windows and doors.
- 4.2.2 Provide two (2) Pair Decorative Steel gates constructed of 150 mm heavy wall steel tubing with sheet steel cover both sides, one pair for each opening. Provide view port in each gate. Total height shall match height of concertina wire on fence. Gate shall be topped with Concertina wire shall be double 45 degree outriggers on top of gate posts with 3 strands of 14 gage barbed wire on each side and a center concertina wire. Verify width at site. Provide drop arm at each opening on pivot with counter weight for ease of operation.

4.3 CARPENTRY

- 4.3.1 If Contractor chooses to utilize wood purlins, provide and install roof purlins of natural wood, 1 meter on center securely wedged between steel H structural joists. Tightly fit 3cm boards over roof structure and nail into wood purlins. New roofing shall extend a minimum of 30cm past the exterior surface of the wall.
- 4.3.2 If Contractor chooses to utilize wood fascia and soffit boards, provide and install 3cm fascia and soffit boards. Wood boards shall be planed and smooth ready for paint finish. Soffit shall extend 30cm out from exterior wall surface. Extend fascia board down past bottom of soffit a minimum of 6mm for water drip. Extend roof decking out over fascia a minimum of 2cm. Provide a 4cm drip flashing over edge of roof decking so that it extends past bottom of decking on all sides of the building. Provide continuous soffit venting of all overhangs at both bottom and top of roof slope.
- 4.3.3 If Contractor chooses to utilize wood ceiling batten strips, wood ceiling batten strips, 2cm x 6cm, shall be nailed to the bottom of the wood purlins. Battens shall be spaced at 40cm on center (or per IBC requirements if sheetrock is substituted for plaster). This is for the support of a plaster ceiling.
- 4.3.4 Finish carpentry: repair or replace damaged or missing wooden handrails at all stairs. Install new replacement wood pieces to match existing wood rail in species, grain and color. Apply transparent finish to existing and replaced pieces to match.
- 4.3.5 Caulk all joints between masonry/stucco and wood window and doorframes and metal sills and wood window frames to prevent the passage of wind and water. Material shall be a 100% silicone, white or clear, applied with a caulking gun, if painting is not required. Where caulk is to be painted, siliconized acrylic or siliconized acrylic latex

shall be used. Surfaces must be clean, dry, and free of dirt. Caulking bead should be 6mm. Smooth to produce a concave filet between the adjoining 90 degree angle surfaces. Allow to cure 2-4 days before painting.

4.4 WINDOWS AND DOORS @ REMODELED BUILDINGS

- 4.4.1 Provide 5mm single glazing to replace damaged or missing glass panes to fit existing window openings. Existing window cladding shall be provided with insect screening permanently secured similar to original installation. Rehabilitate or provide new locking and operational device on the interior of each window and screen and exterior door. Provide new weather stripping system for all exterior windows and doors.
- Provide screens on all exterior doors and windows as required. Flashing shall be installed in openings where new window will be installed. Flashing shall be caulked and placed properly to prevent water seepage under window frames.
- 4.4.2 Interior doors shall be flush solid core wood with wood frames sized to match existing door openings. For new replacement doors provide 3 hinges. Doors shall be fully equipped see section 4.1 for hardware.
- 4.4.3 Exterior wood service doors and frames shall be replaced with hollow metal doors and frames. Doors shall be fully equipped see section 4.1 for hardware.
- 4.4.4 Exterior aluminum and glass entry doors and associated storefront system to be cleaned, reconditioned, or replaced in kind. Replace all operating hardware. All glazing in or adjacent to doors shall be tempered per IBC.

5.1 CONCRETE SLAB ON GRADE

- 4.4.1 Place 150 mm (6") of capillary water barrier below areas to receive a concrete slab on properly compacted soil free of organic material.
- 4.4.2 A 6 mil plastic vapor barrier shall be placed over the crushed stone prior to placing of concrete slabs.
- 4.4.3 Contractor shall not place concrete without prior inspection and subsequent approvals of buried utilities and sub-surface by the Contracting Officer.

5.2 MASONRY

- 5.2.1 Storage of masonry materials shall be in a dry place or materials shall be covered with a plastic protective layer. Cover open walls each day to keep them protected and dry.
- 5.2.2 New masonry walls and repairs shall be accomplished using concrete masonry units (CMU) shall be 20cm x 40cm x 20cm high or 10cm x 40cm x 20cm high. They shall be installed in running bond level and plumb. Mortar joints shall be 9mm on all sides between CMU. Joints shall be struck with a concave tool to provide a smooth recessed curved surface. Install only quality units. The surface shall be free of chips, cracks, or other imperfections that would detract from the overall appearance of the finished wall. Defective CMU or mortar shall be rejected.
- 5.2.3 Calculations shall be submitted for any load bearing or shear wall consisting of masonry units. Mortar and any grout required by design shall be of strength specified by the Contractor.

5.3 METAL

5.3.1 Galvanized metal windowsills, 1mm (20 gage), shall be installed under louver openings. The metal windowsills shall have a turn down of 5cm over the exterior stone. Metal sills shall extend from side to side of the masonry opening in a single piece. Extend the metal windowsill a minimum of 2 cm under the bottom of the louver. Install masonry mortar as required for a smooth surface under the windowsills. Sills shall slope a minimum of 6mm to the exterior and not allow water to puddle.

6.0 ROOFING AND WEATHERPROOFING AT EXISTING BUILDINGS

- 6.1 Patch and/or seal existing roof areas at location of new roof penetrations as may occur to preserve integrity of water resistance of roofing system. Provide metal roof gutters and metal downspouts, divert all roof runoff away from building, entries and walking surfaces.
- 6.1.2 Clean and inspect existing roof drains. Replace corroded, damaged and leaking drains as may occur. Reseal roofing to preserve integrity.
- 6.1.3 Asphalt shall not be heated higher than 24 degrees C (75 degrees F) above the EVT or 10 degrees C (50 degrees F) below the flash point or 274 degrees C (525 degrees F) maximum whichever is lower. EVT and flash point temperatures of asphalt in the kettle shall be conspicuously posted on the kettle. Coal tar bitumen shall not be heated above 218 degrees C (425 degrees F) or as recommended by the manufacturer. Heating kettles shall be provided with automatic thermostatic controls and an accurate thermometer. Kettle operations shall be in attendance at all times during the heating to ensure that the maximum temperature specified is not exceeded. Equipment utilizing flame-heat shall not be placed on the roof.
- 6.1.4 Asphalt shall be applied with a range of 14 degrees C (25 degrees F) below and above the EVT. Temperature of coal-tar bitumen at the time it is applied shall be in accordance with the manufacturer's recommendations. Application temperatures shall be measured at the mop bucket or mechanical applicator. Bitumen at a temperature below the recommended temperature shall be returned to the kettle. Each layer of felt shall be laid in not less than 0.97 kg (20 pounds) nor more than 1.7 kg (35 pounds) of asphalt per square meter or not less than 1.4 kg (30 pounds) nor more that 1.7 kg (35 pounds) of coal-tar bitumen per square meter.
- 6.1.5 Four plies of 900mm (36 inch) wide glass roofing felts shall be placed shingle fashion in solid mopped bitumen. Felt plys shall be laid at right angles to the roof slope with a minimum 150mm (6 inch) end-laps staggered at least 300mm (12 inch). Felts shall be applied in 900mm (36 inch) widths with 630mm (24 and 2/3 inch) side laps and starter sheets 300, 600, and 900mm (12, 24, 36 inches) wide along eaves to maintain 4 full plies including base sheet. The full width of each ply shall be placed in hot bitumen immediately behind the applicator. A squeegee, broom, or follow through tool shall be used to eliminate air pockets and obtain complete adhesion between plies. Bitumen shall be visible beyond all edges of each ply as it is being installed. Plies shall be laid free of wrinkles, creases or fishmouths. Each layer of roofing felt shall be carried up to the top of the parapet wall and held in place until cap flashing is installed. Workers shall not walk on mopped surfaces when the bitumen is fluid.
- 6.1.6 At the end of a day's work or when precipitation is imminent, the terminated edge of built-up roofing shall be sealed with 2 full width strips of roofing felt set in and coated with bituminous cement. One half-width of the strips shall be extended up and over the finished roofing and the other half-width extended out and onto the bare roof deck. Sealing strips shall be removed before continuing installation of roofing.
- 6.1.7 Flashings shall be provided over parapets, scuppers, expansion joints, and at penetrations to make the work watertight. Flashing shall be installed immediately after the top ply of felt is placed.

6.2 ROOFING AND WEATHERPROOFING AT NEW BUILDINGS

- 6.2.1 On sloping roofs provide and install .70mm (24 gauge) galvanized steel in either corrugated or standing seam design. Metal roofing shall be anchored to the steel "Z" purlins or wood deck sub-surface using exposed fasteners at 30cm on center at all seams and at 60cm on center in the panel field. Fasteners shall be placed at the top of the corrugation taking care not to dent panel. Roof sealant or adhesive shall be placed over each anchor head. Roofing system shall include all edge, ridge and penetration flashings necessary for a watertight installation and as described in 3.8.2 above. Roofing shall be galvanized mil finish. Panels shall be overlapped two corrugations side to side and be continuous sheets from ridge to eave. Provide continuous ridge vents on all gable roofs. Roof insulation shall be R-19. Provide metal roof gutters and metal downspouts, divert all roof runoff away from building, entries and walking surfaces.
- 6.2.2 Caulk all joints between masonry/stucco and wood window and doorframes and metal sills and wood window frames to prevent the passage of wind and water. Material shall be a 100% silicone, white or clear, applied with a caulking gun, if painting is not required. Where caulk is to be painted, siliconized acrylic or siliconized acrylic latex

shall be used. Surfaces must be clean, dry, and free of dirt. Caulking bead should be 6mm. Smooth to produce a concave filet between the adjoining 90 degree angle surfaces. Allow to cure 2-4 days before painting.

- 6.2.3 Provide and install 4 ply built up roofing over concrete deck. Contractor may propose to the Contracting Officer an alternate roofing system with justification for consideration and alternate pricing.
- 6.2.4 Concrete roof deck shall slope 21mm per m as shown on drawings. Wood cants shall be installed around perimeter at intersection of roof deck and parapet wall. Provide all required flashings with cant strips around duct and pipe penetrations and along the curbed expansion joint between the dining area and kitchen. Rigid board 100 mm insulation R-19 min. shall be loose laid over the 4 ply roof and held in place with ballast stone. Aluminum flashings shall be installed at roof penetrations, expansion joint, over top of parapet walls, and at scupper drains.
- 6.2.5 The following shall be submitted to the Contracting Officer prior to start of any roofing work for information.
- 1. The inspection procedure for roofing installation.
- 2. Certificates of Compliance for felts and bitumen's.
- 3. Felt, fabrics, and roll roofing shall be kept dry before, during, and after delivery to the site and shall be stored in an enclosed building or in a closed trailer, and stored on end 1 level high. Felt rolls shall be maintained at a temperature above 10 degrees C (50 degrees F) for 24 hours immediately before laying.
- 4. Products used in roofing:
- 6.2.6 Asphalt: ASTM D 312, Type II. Bills of lading shall indicate the flash point and equiviscous temperature (EVT) or this information shall be shown on labels for each container of asphalt.
- 6.2.7 Coal-Tar Bitumen: ASTM D 450, Type III, as an option to asphalt.
- 6.2.8 Cants: shall be made of wood not less than 89mm (3 ½ inches) high cut to reduce change indirection of the membrane to 45 degrees or less.
- 6.2.9 Base Sheet: shall conform to ASTM D 4601, Type II, with no perforations.
- 6.2.10 Glass Roofing Felt: ASTM D 2178, Type IV or VI, except felts for coal tar systems shall be impregnated with a bituminous resin coating which is compatible with coal tar bitumen.
- 6.2.11 Organic Felt Base: ASTM D 2626 for use with asphalt roofing system.
- 6.2.12 Organic Felt: ASTM D 226 for use with asphalt roofing system and ASTM D 227 for use with coal tar roofing system. Organic felts may be used for bitumen stops, and edge envelopes.
- 6.2.13 Insulation: R-19 min. thick extruded polystyrene rigid foam board, 2.82 Kg/sq cm (40 pounds/ in sq) compressive strength, hydrophobic, type VI.
- 6.2.14 Aluminum Flashing: 0.8mm (0.032 inch) thick.
- 6.2.15 Crushed Stone Ballast: Crushed stone, gravel, or crushed slag subject to approval of the Contracting Officer shall be placed over the loose laid insulation as a ballast. Aggregate shall be light colored and opaque.
- 6.2.16 The entire roofing system, excluding insulation and stone ballast, shall be finished in 1 operation up to the line of termination at end of day's work. Phased construction will not be permitted.
- 6.2.17 Loose laid rigid insulation boards shall be installed in 2 layers with staggered joints in both directions after completion of 4 ply roofing. Stone ballast shall be applied to entire surface of top layer of insulation board at the rate of 49 Kg/m sq (10 pounds/ SF).
- 6.2.18 Roofing operations shall be coordinated with sheet metal work so that sheet metal flashings are installed to permit continuous roof surfacing operations the same day felts are installed.

- 6.2.19 Air temperature shall be above 4 degrees C (40 degrees F) and there shall be no visible ice, frost, or moisture on the roof deck at the time roofing is installed.
- 6.2.20 Prior to beginning roofing operations roof deck shall be broom swept to remove all loose dirt. If caked on dirt is encountered, scrape and remove prior to roofing operations. Surfaces shall be inspected and approved immediately before application of roofing and flashings. The substrate construction of a bay or section of the building shall be complete before roofing work is begun thereon. Roofing applied directly on concrete shall not be scheduled until frothing or bubbling does not occur when hot bitumen is applied to the concrete and until the hot bitumen sticks tightly to the concrete. Vents and other items penetrating the roof shall be secured in position and properly prepared for flashing. Nailers, curbs, and other items attached to the roof surface shall be in place before roofing is begun. Roofing and flashings shall be applied to a smooth and firm surface free of ice, frost, visible moisture, dirt, projections, and foreign materials.
- 6.2.21 Cants shall be installed in the angles formed between the roof and walls or other vertical surfaces. Cants shall be laid in a solid coat of bituminous cement just prior to laying the roofing plies. Cants shall be continuous, and shall be installed in lengths as long as practicable. Additional are not required at locations where cast-in-place cants are integrally formed with the structural deck.
- 6.2.22 Prior to application of primer on precast concrete decks, joints shall be covered with 100mm (4 inch) wide strip of roofing felt, embedded in and coated with bituminous cement.
- 6.2.23 Mechanical application devices shall be mounted on pneumatic-tired wheels, and shall be designed and maintained to operate without damaging the roofing membrane, or structural components.
- 6.2.24 Concrete surfaces to receive bitumen shall be uniformly coated with primer at a rate of not less than 0.4L per m square (1 gallon per square) and allowed to dry. Primer shall be compatible with the bitumen to be used.
- 6.2.25 Asphalt shall not be heated higher than 24 degrees C (75 degrees F) above the EVT or 10 degrees C (50 degrees F) below the flash point or 274 degrees C (525 degrees F) maximum whichever is lower. EVT and flash point temperatures of asphalt in the kettle shall be conspicuously posted on the kettle. Coal tar bitumen shall not be heated above 218 degrees C (425 degrees F) or as recommended by the manufacturer. Heating kettles shall be provided with automatic thermostatic controls and an accurate thermometer. Kettle operations shall be in attendance at all times during the heating to ensure that the maximum temperature specified is not exceeded. Equipment utilizing flame-heat shall not be placed on the roof.
- 6.2.26 Asphalt shall be applied with a range of 14 degrees C (25 degrees F) below and above the EVT. Temperature of coal-tar bitumen at the time it is applied shall be in accordance with the manufacturer's recommendations. Application temperatures shall be measured at the mop bucket or mechanical applicator. Bitumen at a temperature below the recommended temperature shall be returned to the kettle. Each layer of felt shall be laid in not less than 0.97 kg (20 pounds) nor more than 1.7 kg (35 pounds) of asphalt per square meter or not less than 1.4 kg (30 pounds) nor more that 1.7 kg (35 pounds) of coal-tar bitumen per square meter.
- 6.2.27 Four plies of 900mm (36 inch) wide glass roofing felts shall be placed shingle fashion in solid mopped bitumen. Felt ply's shall be laid at right angles to the roof slope with a minimum 150mm (6 inch) end-laps staggered at least 300mm (12 inch). Felts shall be applied in 900mm (36 inch) widths with 630mm (24 and 2/3 inch) side laps and starter sheets 300, 600, and 900mm (12, 24, 36 inches) wide along eaves to maintain 4 full plies including base sheet. The full width of each ply shall be placed in hot bitumen immediately behind the applicator. A squeegee, broom, or follow through tool shall be used to eliminate air pockets and obtain complete adhesion between plies. Bitumen shall be visible beyond all edges of each ply as it is being installed. Plies shall be laid free of wrinkles, creases or fishmouths. Each layer of roofing felt shall be carried up to the top of the parapet wall and held in place until cap flashing is installed. Workers shall not walk on mopped surfaces when the bitumen is fluid.

- 6.2.28 At the end of a day's work or when precipitation is imminent, the terminated edge of built-up roofing shall be sealed with 2 full width strips of roofing felt set in and coated with bituminous cement. One half-width of the strips shall be extended up and over the finished roofing and the other half-width extended out and onto the bare roof deck. Sealing strips shall be removed before continuing installation of roofing.
- 6.2.29 Flashings shall be provided over parapets, scuppers, expansion joints, and at penetrations to make the work watertight. Flashing shall be installed immediately after the top ply of felt is placed.

7.0 FINISHES

All finishes, colors and materials in existing building and new buildings shall match. See Section 01335 for color submittals required. Provide color boards with all materials for COR approval prior to ordering materials.

- 7.0.1 The exterior of all buildings shall be stucco or exposed concrete painted with two coats of paint, tan. Install new stucco in 2 coats. The first coat shall be a scratch coat approximately 1 cm thick. Allow 7 days to cure. The second coat shall be finish stucco, smooth finish, approximately 1 cm thick. Allow 7 days to cure before painting. Paint shall be flat tan, designated for exterior use, with less than .06% lead by weight. Color of tan shall be selected by the Contracting Officer from color board provided by the Contractor.
- 7.0.2 Interior walls shall be plaster applied in a similar manner as exterior stucco. Paint with 2 coats of semigloss off-white with less than .06% lead by weight. Color of off-white shall be selected by the Contracting Officer from color board provided by the Contractor
- 7.0.3 Ceilings of Barracks, and Headquarters, shall be plaster applied in 2 coats over wire mesh, which is to be stapled to the 2cm x 6cm wood battens. Paint ceiling with 2 coats of flat white, with less than .06% lead by weight. Gypsum board may be used in lieu of plaster but framing supports for Gypsum board shall be as follows: For ½" thick gypsum board structural fastener supports shall be not further apart than 40 cm. If gypsum board is thicker follow guidelines in ASTM C 840 for supports and fastener frequency
- 7.0.4 Ceilings of Dining Facility shall be exposed concrete painted with 2 coats of flat white, with less than .06% lead by weight. Color of flat white shall be selected by the Contracting Officer from color board provided by the Contractor
- 7.0.5 Paint all exposed wood fascia, soffit, and doors with 2 coats of gloss enamel, white. Color of white shall be selected by the Contracting Officer from color board provided by the Contractor
- 7.0.6 Floors in wet areas shall be 30cm x 30cm terrazzo tile with thin set mortar. Joints shall be 2-3mm. Waterproof gray grout shall be applied the full depth of the tile. Floors shall slope to floor drains. Color of tile shall be selected by the Contracting Officer from color board provided by the Contractor.
- 7.0.7 Walls in wet areas shall be tiled with 150mm x 150mm glazed ceramic tile up to 2 meters above the floor to include interior of toilet stalls, showers and behind sinks. Joints shall be 2-3mm. Waterproof gray grout shall be applied full depth of the tile. Grout shall cure for 72 hours and then be sealed with a commercial grout sealant in two coats. Color of tile shall be selected by the Contracting Officer from color board provided by the Contractor.
- 7.0.8 The ablution drain areas shall be recessed below the floor level 20cm and lined with ceramic tile. Ceramic tile shall extend up the wall past the water spigots to a height of 2m above finished floor. Seats shall be formed concrete with terrazzo tile finish to match the floor, 30cm x 30cm x 30cm high finished dimensions. Color of ceramic tile shall be selected by the Contracting Officer from color board provided by the Contractor. Spacing between tiles shall be similar to terrazzo tile.
- 7.0.9 All other floors are to be completely cleaned and painted with floor enamel. Color to be approved by the Contracting Officer from color board provided by the Contractor.
- 7.0.10 Kitchen in Dining Facility shall be covered with terrazzo flooring. Walls in kitchen shall be ceramic

- tile up to 2m above finished floor. Floor in Dining area shall be painted concrete. Color of paint shall be selected by the Contracting Officer from color board provided by the Contractor.
- 7.0.11 Paint all exposed exterior steel trim, frames, doors and pipe railings with one coat oil-based primer, with 2 coats of oil-based alkyd gloss enamel. Color shall be selected by the Contracting Officer from color board provided by the Contractor.
- 7.0.12 Paint all exposed wood trim, frames, and doors with 2 coats of gloss enamel, Color of flat white shall be selected by the Contracting Officer from color board provided by the Contractor
- 7.0.13 Floor finish in wet areas shall be concrete finish, except in bathrooms, ablution and shower rooms. Bathroom, ablution, and shower floors shall be covered with floor tiles. Bathroom, ablution, and shower floor slope shall be obtained with sloping mortar bed of 2cm min thickness. Provide minimum 30 mm per 1000 mm slope to bathroom and shower floor drains. Remove existing mortar setting bed or provide curb at room entrance to contain slope within bathroom and shower wet room. Color of ablution, bathroom and shower tile shall be selected by the Contracting Officer from color board provided by the Contractor
- 7.0.14 Walls in wet areas (toilet rooms, shower rooms, and ablution rooms) shall be tiled with 150mm x 150mm glazed ceramic tile up to 2 meters above the floor to include interior of toilet stalls, ablution, showers and behind sinks. Joints shall be 2-3mm. Waterproof grout shall be applied full depth of the tile. Grout shall cure for 72 hours and then be sealed with a commercial grout sealant in two coats. Color of tile shall be selected by the Contracting Officer from color board provided by the Contractor.

8.0 MATERIALS

The followings are few typical American Standards. The Contractor should use these standards to provide sound structural design if local standards are not available, relevant, or applicable. The Contractor shall follow American Concrete Institute Standards for design and installation of all concrete structures.

Concrete 210.0 kg/sq.cm cylinder strength @ 28 days. Steel Reinforcements 4218.0 kg/sq.cm (Fy = 60.0 ksi) yield strength.

Welded Wire Fabric ASTM A185

Anchor Bolts ASTM A307 using A36 steel.

Concrete Masonry Units ASTM C90, Type I (normal wt, moisture Control).

Mortar ASTM C270, Type S

Grout ASTM C476

Joint Reinforcements Standard 9-gage minimum, Ladder Type Structural Steel. ASTM A36: 2530.0 kg./sq.cm (Fy

= 36,000psi)

Welding: AWS (American Welding Society) D1.1-2002.

10.0 MECHANICAL

10.1 SCOPE OF WORK

Refer to Section 1010 for a description of the HVAC systems, plumbing system, fire protection system, and special mechanical system requirements for specific buildings.

10.1.1 General

10.1.1.1 The Contractor shall design, supply, fabricate and install new heating ventilation, exhaust and air conditioning systems (HVAC), plumbing, fire protection, and special mechanical systems, or part these of, as described in Section 01010 Scope of Work, and as described herein.

10.1.1.2 Subcontractor Qualifications

The HVAC and plumbing, fire protection, and special mechanical systems works shall be executed by specialist sub-Contractors experienced in the design and construction of these types of systems.

10.1.1.3 Standard Products

All materials and equipment shall be standard product of a manufacturer regularly engaged in the manufacture of the product and shall duplicate items that have been in satisfactory use for at least two (2) years prior to bid opening.

10.1.1.4 Equipment and Product Requirements

All materials and equipment shall be the standard cataloged product of manufacturer's regularly engaged in production of such materials and equipment, and shall be the manufacturer's latest standard design. Each major component shall have the manufacturer's information on a plate secured to the equipment, marked in both American English and Dari.

10.1.2 CODES, STANDARDS AND REGULATIONS

The design and installation of equipment, materials and work covered under the mechanical services shall conform to the following standards, codes and regulations as applicable except where otherwise indicated under a particular clause. The publications to be taken into consideration shall be those of the most recent editions. Standards other than those mentioned above may be accepted provided that the standards chosen are internationally recognized and meet the minimum requirements of the specified standards. The Contractor shall submit proof of equivalency to the Contracting Officer for approval.

IBC – International Building Code IPC – International Plumbing Code

NFPA - National Fire Protection Association

10.2 HVAC SYSTEMS DESIGN REQUIREMENTS

10.2.1 HVAC System Design Requirements

Refer to Section 5.1 for general requirements applicable to all mechanical disciplines.

10.2.1.1 Heat gain and loss calculations shall be in accordance with the current edition of the American Society of Heating, Refrigeration, and Air-Conditioning Engineers (ASHRAE) Handbook of Fundamentals. Computergenerated load calculations shall be provided, and shall include complete input and output summaries, Refer to Section 01010, Scope of Work – Mechanical, for heating capacity calculation considerations. Heat gain and heat loss design calculations shall be based on the weather data shown below:

Site location: Kabul, Afghanistan

Latitude: (approx.) 34.33 degree North Longitude: (approx.) 69.13 degree East Elevation: (approx.) 1,791 m (5,879 ft)

Outside Design Temperature

Summer: 35 degree C (95 degree F) DB and 18.6 degree C (66 degree F) WB

Winter: -13 degree C (7 degree F) DB

Range of DB: Summer 18.3 degree C (33 degree F)

Average extreme wind: 40 kph (25 mph)

Prevailing wind direction: Summer: North, Winter: West

Indoor Temperature

Summer: 25 degree C (78 degree F) DB, 50% RH

Winter: 20 degree C (68 degree F) DB

Noise Levels

Noise levels generated by HVAC systems inside occupied spaces shall not exceed 35 NC 10.2.3 Wall Penetrations

Building wall penetrations shall be carefully made so as not to deteriorate the structural integrity of the wall system and must be approved by a licensed professional structural engineer

10.3 HVAC EQUIPMENT

- 10.3.1 All outside air intakes shall be provided with weatherproof louvers and a bird screen, where existing outside air intakes do not include these components.
- 10.3.2 Provide 50mm (2 inch) thick permanent washable metal mesh type filters as first stage for filtration of dust at all existing outside air intakes. Provide new frames to accept filters where none exist.

10.3.3 Ventilation and Exhaust Fans

All fans used for ventilation and pressurization shall be selected for required performance and for minimum noise level. Unit mounted supply and exhaust fans shall be centrifugal forward curved, backward inclined, or airfoil fans with non-overloading characteristics of high efficiency and quiet running design. The fans shall be heavy-duty type with durable construction and proven performance in arid and dusty desert environment. Each exhaust fan shall be provided with gravity dampers and shall be complete with vibration isolators, external lubricators, accessories and controls necessary for specified sequence of operation.

10.3.4 Ceiling Fans

All fans used for ventilation shall be selected for required performance and for minimum noise level. Ceiling mounted fans shall be adjustable to fit ceiling slope. Unit shall be 52" white with matt white blades, equipped with high performance torque-induction motor and 13 degree blade pitch. Motor and blades shall be balanced for wobble free operation.

10.3.5 Heating Equipment

Repair/Install heating as specified in the Scope of Work. Installations shall be in compliance with manufacturer recommendations. Where heaters are replaced the replacements shall be provided with built-in adjustable thermostats/controls and with filter elements where applicable.

10.4 BOILER

Boiler shall be suitable for installation in the space shown with ample room for opening doors and cleaning and removal and replacement of tubes. Boiler shall have sufficient output of (kW) BTU per hour with an efficiency of not less than required by the applicable military specification. Boiler shall be designed, tested, and installed in accordance with ASME BPVC SEC IV and ASME CSD-1. Boiler shall be complete with an explosion-relief door, located in accordance with manufacturer's recommendations. Paint boiler in accordance with manufacturer's standard requirements. Boiler design working pressure shall be 207 kPa (30 psig). Boiler operating pressure shall be 83 kPa (12 psig). Boiler operating temperature shall be 82 degrees C (180 degrees F). Boiler return water temperature shall be 71 degrees C (160 degrees F). Provide a thermostatically controlled three-way mixing valve on the water supply to the boiler suitable for operating conditions of the boiler.

10.4.1 Detail Drawings

Provide Detail drawings of entire system.

10.4.2 Water Analysis

Provide test reports of water analysis.

10.4.3 Safety Standards

Hot water boilers, burners, and any supplementary control devices, safety interlocks, or limit controls required under this specification shall meet requirements of the Oil-Fired Units: UL 726 or NFPA 85C.standards as applicable:

10.5 Control Wiring and Protection Devices

Control wiring and protection devices shall be the manufacturer's standard, pre-wired, and installed at the factory. Operation of new control systems shall be manufacturer's standard configured for 220V/50Hz or 24V operation.

10.6 Thermostats

All new thermostats shall be located near the return grills and mounted 1.5 meters (4.9 feet) above the floor and shall be easily accessible. In lieu of a thermostat, a temperature sensor may be located in the room location and connected to the control thermostat near the unit. Thermostats located inside occupied areas shall be provided with lockable covers. Temperature control devices for existing systems being replaced shall be similar to the control devices being replaced.

10.7 Fittings

Provide fittings compatible with the pipe being provided and shall conform to the following requirements.

Steel or Malleable Iron Pipe

Sizes 3 to 50 mm 1/8 to 2 inches. ASME B16.11 steel socket welding or screwed type or ASME B16.3 for screwed type malleable iron fittings.

Steel, Cast Iron, or Bronze

Sizes 65 mm 2 1/2 inches and above. Steel fitting butt-welding type ASME

B16.9 or ASME B16.5 flanged type. Cast iron fittings flanged type ASME

B16.1. Bronze fittings up to 200 mm 8 inch size flanged type ANSI B16.24.

Fittings for Copper Tubing

ANSI B16.18 cast bronze solder joint type or ASME B16.22 wrought copper solder joint type. Fittings may be flared or compression joint type.

10.8 Flexible Connectors:

Provide flexible pipe connectors on piping connected to equipment. Flexible section shall consist of tetrafluoroethylene resin, corrosion-resistant steel, bronze, monel, or galvanized steel. Material provided and configuration shall be suitable for pressure, temperature, and circulating medium. Flexible section shall have threaded, welding, soldering, flanged or socket-weld ends and shall be suitable for service intended. Flexible section may be reinforced with metal retaining rings, with built-in braided wire reinforcement and restriction bolts or with wire braid cover suitable for service intended.

10.8.1 Welding Materials: Comply with Section II, Part C, of the ASME Boiler and Pressure Vessel Code for welding materials appropriate for wall thickness and for chemical analysis of pipe being welded.

10.8.2 Gasket Material: Thickness, material, and type suitable for fluid to be handled; and design temperatures and pressures.

10.8.3 VALVES

Valves shall have rising stems and shall open when turned counterclockwise.

10.8.3.1 Gate Valves

a. Bronze Gate Valves: MSS SP-80, 50 mm 2 inches and smaller, wedge disc, inside screw type not less than Class 150. Use solder joint ends with copper tubing.

Steel Gate Valves: ASME B16.34, provide with open stem and yoke type with solid wedge or flexible wedge disc and heat and corrosion-resistant steel trim.

b. Cast Iron Gate Valves: MSS SP-70, 65 mm 2 ½ inches and larger, open stem and yoke type with bronze trim.

10.8.3.2 Globe and Angle Valves

a. Bronze Globe and Angle Valves: MSS SP-80, 50 mm 2 inches and smaller, Class 200, except use Class 150 with solder ends for copper tubing. Valves shall have renewable seat and discs except solder end valves, which shall have integral seats.

b. Steel Globe and Angle Valves: ASME B16.34, provide with heat and corrosion-resistant trim.

c. Cast Iron Globe and Angle Valves: MSS SP-85, 65 mm 2 ½ inches and larger, with bronze trim, tapped drains and brass plug.

10.8.3.3 Check Valves

a. Bronze Check Valves: MSS SP-80, 50 mm 2 inches and smaller, regrinding swing check type, Class 200.

b. Steel Swing Check Valves: [ASME B16.34], regrinding swing check type, Class 200.

- (1) Swing check valves shall have bolted caps.
- (2) Steel Lift check valves 50 mm 2 inches and smaller shall have bolted caps. Lift check valves 65 mm $2\frac{1}{2}$ inches and larger shall have pressure seal caps.

c. Cast Iron Check Valves: ASME B16.34, 65 mm 2 ½ inches and larger, bronze trim, non-slam, eccentric disc type for centrifugal pump discharge service.

10.8.3.4 Temperature Regulating Valves

Provide ASSE 1017 copper alloy body with adjustable range thermostat.

10.8.3.5 Water Pressure-Reducing Valves

ASSE 1003.

10.8.3.6 Plug Valves

MIL-V-12003, except that a replaceable valve seat will not be required.

10.8.3.7 Ball Valves

Flanged or butt-welding ends ball valve shall conform to MSS SP-72, steel. Threaded, socket-welding, solder joint, grooved and flared ends shall conform to MSS SP-110.

10.8.3.8 Radiator Valves

Radiator valves shall be angle or straightway pattern, with packed or packless bonnet shutoff globe type, designed especially for hot water heating system. Valve shall be constructed of brass or bronze or copper alloy conforming to

ASTM specifications for materials with non-metallic renewable disc and plastic wheel handle for shutoff service.

10.8.3.9 Flow Control Balancing Valves

Copper alloy or cast iron body, copper alloy or stainless internal working parts, and integral pointer that indicates the degree of valve opening. Valves shall be suitable for 862 kPa (gage) 125 psig at 87.8 degrees C 190 degrees F hot water. Valve shall function as a service valve when in fully closed position. Valve body shall have factory-installed tappings for differential pressure meter connections for verification of pressure differential across valve orifice. Meter connections shall have positive check valves or shutoff valves. Each valve shall have metal tag showing the liters per second gallons per minute flow for each differential pressure reading.

10.8.3.10 Butterfly Valves

Conform to MSS SP-67, Type I - Tight shut off valve, and flanged valve ends. Valve body material shall be steel and shall be bubble tight for shutoff at 1034 kPa (gage) 150 psig. Flanged and flangeless type valves shall have Type 300 series corrosion resistant steel stems and corrosion resistant or bronze discs with molded elastomer disc seals. Flow conditions shall be for the regulation from maximum flow to complete shutoff by way of throttling effect. Valves smaller than 200 mm 8 inches shall have throttling handles. Valves 200 mm 8 inches and larger shall have totally enclosed manual gear operators with adjustable balance return stops and indicators. Valves shall have a minimum of 7 locking positions and shall be suitable for water temperatures up to 93 degrees C 200 degrees F.

10.8.3.11 Butterfly Valves 2 Millimeters 2 Inches and Smaller Valves shall be one-piece and three-piece design with male or female threaded or soldered end connections and shall be bubble tight for shutoff at 1034 kPa (gage) 150 psig. Stem and disc assembly shall be of 300 series corrosion resistant steel. Disc seal assembly shall be of 300 series corrosion resistant steel. Disc seal shall be suitable for the liquid being used in the system in which the valve is to be installed. Valves shall be suitable for water temperature up to 93 degrees C 200 degrees F and shall be capable of operating at the rated pressure of 1034 kPa (gage) 150 psig. Valves shall be designed for throttling service use by valve lever and indicator adjustment.

10.8.3.12 Relief Valves

Bronze body, Teflon seat, stainless steel stem and springs, automatic, direct pressure actuated, capacities ASME certified and labeled.

10.8.3.13 VALVE APPLICATIONS

Install valves in conformance with ASME B31.9. Provide gate valves unless otherwise directed. Install valves with stems horizontal or above. Locate or equip stop valves to permit operation from floor level, or provide with safe access in the form of walkways or ladders. Install valves in positions accessible for operation and repair. Install shutoff-duty valves at each branch connection to supply mains and elsewhere as indicated.

10.8.3.14 Globe Valves

Install globe valves so that the pressure is below the disk and the stem horizontal.

10.8.3.15 Radiators Valves

Provide radiator valves on water inlet and balancing valves on water outlet of terminal heating units such as radiation, unit heaters, and fan coil unit.

10.8.3.16 Relief Valves

Provide valves on pressure tanks, low-pressure side of reducing valves, heat exchangers, and expansion tanks. Select system relief valve so that capacity is greater than make-up pressure reducing valve capacity. Select equipment relief valve capacity to exceed rating of connected equipment. Pipe relief valve outlet to the nearest floor drain.

10.8.3.17 AIR VENTS

Provide float type air vent in hydronic systems as applicable. Vent shall be constructed of brass or semi-steel body, copper float, and stainless steel valve and valve seat. Design air vent to suit system operating temperature and pressure. Provide isolating valve to permit service without draining the system. Pipe discharge of vent to a drain.

10.8.3.18 STRAINERS

Strainers for classes 125 and 250 piping in IPS 15 to 200 mm ½ to 8 inches, inclusive, FS WW-S-2739 and locate as indicated.

10.8.3.19 EXPANSION TANKS

Provide welded steel, constructed and tested hydrostatically in accordance with ASME BPVC SEC VIII D1. Tank shall be equipped with all necessary fittings. The tank and fittings shall be pressure rated at least equal to the test pressure of the total system. Zinc coat the tank inside and out after fabrication by the hot dip process ASTM A 123/A 123M.

10.9.1 PIPING INSTALLATIONS

Piping fabrication, assembly, welding, soldering, and brazing shall conform to ASME B31.9. Piping shall follow the general arrangement shown. Route piping and equipment within buildings out of the way of lighting fixtures and doors, windows, and other openings. Run overhead piping in buildings in inconspicuous positions. Provide adequate clearances from walls, ceilings, and floors to permit welding of joints and application of insulation. Make provision for expansion and contraction of pipelines. Make changes in size of water lines with reducing fittings. Do not bury, conceal, or insulate until piping has been inspected, tested, and approved. Do not run piping concealed in walls, partitions, underground, or under the floor except as otherwise indicated. Where pipe passes through building structure, locate pipe joints and expansion joints where they may be inspected. Provide flanged joints where necessary for normal maintenance and where required to match valves and equipment. Furnish gaskets, packing, and thread compounds suitable for the service. Provide long radius ells where possible to reduce pressure drops. Pipe bends in lieu of welding fittings may be used where space permits. Pipe bends shall have a uniform radius of at least five times the pipe diameter and shall be free from appreciable flattening, wrinkling, or thinning of the pipe. Do not use mitering of pipe to form elbows, notching straight runs to form full sized tees, or any similar construction. Make branch connections over 50 mm 2 inches with welding tees except factory made forged welding branch outlets or nozzles having integral reinforcements conforming to ASME B31.9 may be used, provided the nominal diameter of the branch is at least one pipe size less than the nominal diameter of the run. Branch connections 50 mm 2 inches and under can be threaded or welded. Run vertical piping plumb and straight and parallel to walls. Provide sleeves for lines passing through building structure. Provide a fire seal where pipes pass through firewall, fire partitions, fire rated pipe chase walls, or floors above grade. Install piping connected to equipment with flexibility for thermal stresses and for vibration, and support and anchor so that strain from weight and thermal movement of piping is not imposed on the equipment.

10.9.2 HANGERS AND SUPPORTS INSTALLATIONS

Unless otherwise indicated, horizontal and vertical piping attachments shall conform to MSS SP-58. Band and secure insulation protection shields without damaging pipe insulation. Continuous inserts and expansion bolts may be used.

10.9.2.1 Install hangers with the following maximum spacing and minimum rod sizes:

- a) NPS 3/4" (DN 20mm): Maximum span, 9 feet (2.7 m); minimum rod size, 1/4 inch (6.4 mm).
- b) NPS 1" (DN 25mm): Maximum span, 9 feet (2.7 m); minimum rod size, ¼ inch (6.4 mm).
- c) NPS 1-1/2" (DN 40mm): Maximum span, 12 feet (3.7 m); minimum rod size, 3/8 inch (10 mm).
- d) NPS 2" (DN 50mm): Maximum span, 13 feet (4 m); minimum rod size, 3/8 inch (10 mm).
- e) NPS 2-1/2" (DN 65mm): Maximum span, 14 feet (4.3 m); minimum rod size, 3/8 inch (10 mm).
- f) NPS 3" (DN 80mm): Maximum span, 15 feet (4.6 m); minimum rod size, 3/8 inch (10 mm).
- g) NPS 4" (DN 100mm): Maximum span, 17 feet (5.2 m); minimum rod size, ½ inch (13 mm).

- h) NPS 6" (DN 150mm): Maximum span, 21 feet (6.4 m); minimum rod size, ½ inch (13 mm).
- 10.9.2.2 Support vertical runs at roof, at each floor, and at 10-foot (3-m) intervals between floors.

10.9.2.2 TERMINAL EQUIPMENT CONNECTIONS

- a) Size for supply and return piping connections shall be same as for equipment connections.
- b) Install control valves in accessible locations close to connected equipment.
- c) Install ports for pressure and temperature gages at coil inlet connections.

10.9.2.3 FIELD QUALITY CONTROL

Perform inspections and tests to demonstrate that piping and equipment, as installed, is in compliance with contract requirements. Start up and operate the system. During this time, periodically clean the various strainers until no further accumulation of foreign material occurs. Exercise care so that minimum loss of water occurs when strainers are cleaned. Adjust safety and automatic control instruments to place them in proper operation and sequence.

10.9.2.7 INSULATION

Provide shop and field applied insulation as specified in the Unified Facilities Guide Specification Section 15080N Select subparagraph above or below.

Where pipe expansion is anticipated, detail expansion compensation for insulation on Drawings and indicate intervals for its occurrence. See MICA's "National Commercial & Industrial Insulation Standards," Plate No. 41A. Coordinate paragraph below with Division 9 Section "Painting."

Edit list below to suit Project

Modify schedules below to suit Project. Do not duplicate requirements inserted in Part 2. Remove brackets and uppercase editor's notes after editing schedules.

Select insulation thicknesses based on guidelines from ASHRAE 90.1 and local mechanical codes. Thickness requirements also vary according to temperature differences, and relative humidity conditions affect thickness selections for each application. Calculate thickness based on thermal properties of insulation materials specified. Consider condensation prevention requirements. Additional insulation and vapor retarders may be required to prevent condensation in some conditions.

Also consider the exposure of installed insulation to damage. Concealed applications have less risk than exposed. Consider finishes for exposed applications. Finish requirements affect factory- and field-applied jacket selection. Edit insulation schedules below to suit Project.

Insert additional subparagraphs below if more size ranges are required. Select or insert pipe material to suit Project.

10.10 TESTING AND COMMISSIONING (Well)

10.10.1 General

- a) Provide all labor, tools and instruments required for testing and adjusting.
- b) Make good all defects developed during testing and trial runs without inconvenience or expense to the Government.
- c) If failure to promptly and conscientiously accomplish testing and balancing within reasonable period results in excessive fuel costs to the Government, an adjustment to the Governments fuel cost will be authorized by the Contracting Officer to reduce the Governments fuel cost to equitable amount by deducting the cost difference from heating contract.
- d) Final Contract payment shall not be made without the Contracting Officers approval of test data and final test performance.

10.10.2 TESTING AND COMMISSIONING REQUIREMENTS

- 10.10.2.1 Measure motor and fan rpm's with direct reading revolution counter and stop watch.
- 10.10.2.2 Measure pipe temperatures with contact type pyrometer.

- 10.10.2.3 Following readings shall be recorded:
- (1) Total CMH (CFM) exhausted by each fan.
- (2) Motor speed, fan speed.
- (3) Input amperes and power input (KW) for each fan.

10.11 PIPING MATERIALS

10.11.1 DOMESTIC WATER SYSTEMS

Domestic water shall be distributed by means of Type K copper tubing for aboveground and Type K for underground.

10.11.2 INTERIOR SOIL, WASTE AND VENT SYSTEMS:

- 10.11.2.1 Pipe and fittings located below grade shall be as specified from the following options:
- a) Service weight (SV) Hub & Spigot Cast Iron Soil Pipe and Fitting (ASTM A74) joined by Lead & Oakum or Elastomeric Gaskets (ASTM C-564) installed using gasket lubricant
- b) No-Hub Cast Iron Soil Pipe and fittings (ASTM A-888-90). No-Hub pipe and fittings shall be joined with couplings constructed of 24-gauge type 304 stainless steel incorporating a neoprene gasket meeting ASTM Standard C-564 latest issue. The couplings shall be torqued to between 100-125 inch pounds. All couplings shall be approved to Factory Mutual (FM) Standard 1680 Class I; 15 psi rated working pressure. Each coupling shall bear the FM approval mark. Couplings shall be manufactured by Clamp-All Corporation.
- 10.11.2.2 Pipe and Fittings above grade shall be as specified from the following options:
- a) Service weight (SV) Hub & Spigot Cast Iron Soil Pipe and Fittings (ANSI R 112.5, ASTM A-74) joined by Lead & Oakum or Elastomeric Gaskets (ASTM C-564) installed using gasket lubricant.
- b) No-Hub Cast Iron Soil Pipe and fittings (ASTM A-888). No-Hub pipe and fittings shall be joined with couplings constructed of 24 gauge type 304 stainless steel, incorporating a neoprene gasket meeting ASTM C-564, latest issue. Couplings for pipe diameter 100mm (4 inches) and larger shall be Clamp-All Corporation (no equal) torqued to between 100-125 inch pounds. Couplings for pipe diameter 75mm (3 inches) and smaller shall be Clamp-All Corporation, torqued to 80 inch pounds. All couplings shall be approved to Factory Mutual (FM) Standard 1680 Class I, 1.02 Atmospheres (15 psi) rated working pressure. Each coupling shall bear the FM approval mark. 75mm (3 inch) diameter wide body type couplings by Tyler, Charlotte or Husky shall be CISPI-301 approved, and are considered equal to 75mm (3 inch) Clamp-All couplings.
- c) Branch piping, 50mm (2 inch) diameter and smaller with no pressure potential exceeding 10 feet of head (4.3 psig, 0.29 Atmospheres) shall be joined by approved stainless steel coupling assemblies as manufactured by Clamp-All, Tyler, Charlotte or Husky and shall be as specified from the following options:
- d) Standard weight galvanized steel conforming to ASTM A-53, Schedule 40, using cast iron screwed recess pattern drainage fittings.
- e) Type "L" hard copper tubing ASTM B-88 using DWV copper drainage fittings and 95-5 tin antimony solder.

10.11.3 FLOOR DRAINS and TRENCH DRAINS

- 10.11.3.1 Floor drains to be Wade, Smith, or Approved equal.
- 10.11.3.2 Provide 4# sheet lead pan for shower receptors and dump sinks except where located on grade; turn up at least 150mm (6 inches) above receptor floor on all sides and as high as practicable at doorstep; pan to be fastened to floor drain clamping device with watertight, durable joint. Dress and solder corners and coat bottom surface of pan with heavy asphaltum base paint.
- 10.11.3.3 Floor and Shower Drain. Cast iron construction with galvanized body, integral seepage pan, and adjustable perforated or slotted chromium plated bronze, nickel-bronze, or nickel brass strainer consisting of a grate and threaded collar.

10.11.3.4 Toilet room floor drains are similar to Floor and Shower Drain except are to be provided with built-in, solid, hinged grate.

10.11.3.5 Trench Drain. Cast iron construction with galvanized body, integral seepage pan, and adjustable perforated or slotted chromium plated bronze, nickel-bronze, or nickel brass strainer consisting of a grate and threaded collar. This style of drain shall be employed in the kitchen area of the dining facilities in response to kitchen cleaning practices of the local national staff. Also, access needs to be provided to the solids collector for routine emptying.

10.11.4 TRAPS

Provide trap for each fixture or item of equipment requiring connection to sanitary drainage system. No fixture to be double-trapped. Traps installed on bell and spigot pipe to be extra heavy weight cast iron. Traps installed on copper pipe to be connected with sweat connections or adapters and to be cast brass when used with copper pipe. Traps shall be connected such that they can be removed and maintained. Exposed traps to be cast brass with cleanout plug and chrome finish. Traps serving floor rains shall be same material as the connecting piping.

10.11.5 CLEANOUTS

- a) Provide cleanouts at base of each soil, waste, vent and rainwater riser and at other points required by Code.
- b) Floor cleanouts to be J.R. Smith #4031 series or approved equal, with cast-iron cut-off ferrule, internal wedge type with seal, adjustable cast iron housing and round scoriated frame and cover with nickel brass top.
- c) Concealed interior wall cleanouts to be J.R. Smith #4422 series or approved equal with stainless steel cover plate.
- d) Exposed wall cleanouts to be J.R. Smith #4420 series or approved equal, less cover.

10.12 PLUMBING FIXTURES

10.12.1 General Requirements

<u>Faucets</u>: Provide renewable seats and discs, indexed metal handles and chrome plated trim. Provide individual service shutoff valve at each hot and/or cold water supply each fixture.

<u>Lavatories</u>: Connecting wastes may be connected with slip joints, lock nuts and rubber gaskets, or with threaded joints. Slip joints not permitted on sewer side of traps. Complete counter type lavatories with mounting rims.

<u>Water Closets</u>: Set floor type water closets on brass or cast iron flanges, using germicidal composition gaskets. After installation of fixture, flush all connecting pipes and adjust valves. Remove labels, plaster, stains and other foreign material from all fixtures.

Flush valves to be quiet-acting Sloan "Royal", or Delany "Flushboy".

<u>Shower valves</u> shown on Schedule to be Symmons or Speakman with integral stops and temperature limit stop. Silicone caulk, neatly, between fixture and adjacent wall or floor.

10.12.2 PLUMBING FIXTURES

- 10.12.2.1 <u>Eastern Water Closet with flush tank assembly</u>. Enameled cast iron or porcelain, recessed platformmounted. Provide a cold water spigot 300mm above finished floor on the right (from a perspective of standing inside of the cubicle and looking out) sidewall of the cubicle. Traps and cleanout locations shall be coordinated with the general construction of the platforms and/or adjacent walls to provide easy access to traps and cleanouts.
- 10.12.2.3 Sinks. Sinks are integral 50cm x 50cm x 30cm deep, 5 each. Provide spray hose next to each set of sinks in DFAC.
- 10.12.2.4 <u>Shower</u>. Showerhead and faucet handles shall be copper alloy. Provide for manual mixing with hot and cold-water valves. In addition to a showerhead, provide each shower stall with a threaded faucet approximately 1.2 m AFF with hot and cold-water controls, mixing valve and a diverter type valve so water can be directed to either

the showerhead or to the lower faucet. Provide each lower faucet with a replaceable 1.5 m long flexible; reinforce vinyl hose with a nozzle and hangar to hold the nozzle end off the floor.

- 10.12.2.5 <u>Service Sink</u>. Standard trap type, enameled cast iron, floor or counter mounted. Service sinks provided in maintenance areas shall be metallic.
- 10.12.2.6 <u>Kitchen Sink</u>. Corrosion resisting formed steel. Faucet bodies and spout shall be cast or wrought copper alloy. Handles, drain assembly, and stopper shall be corrosion resisting steel or copper alloy
- 10.12.2.7 <u>Ablution Trench</u>. Provide trench drain with brass grating and strainer. Provide each station with hot and cold-water valves with manual mixing. Faucet handles shall be copper alloy.
- 10.12.2.8 <u>Grease Interceptor</u>. Steel construction, manual cleaning type with removable checker-plate cover, complete with flow control valve. Tested and rated in accordance with PDI G-101. Concrete shall have 21 MPa (3045 psi) minimum compressive strength in 28 days.
- 10.12.2.9 <u>Floor Sink</u>. Circular or square, with approximately 600mm (2 feet) overall width or diameter and 250mm nominal (10 inches) overall depth. Acid resistant enamel interior with cast iron body, aluminum sediment bucket and perforated grate of cast iron. Outlet size as indicated on plans.

10.13 WATER HEATERS

For new toilet/shower building, diesel-fired water heaters glass-lined steel tanks, high efficiency type insulated with polyurethane foam insulation, replaceable anodes, with adjustable range thermostat to allow hot water settings between 43 and 71 degrees C, 110 and 160 degrees F. Provide posted operating instructions for water heaters. For any single or isolated small shower rooms, electric, wall-mounted water heaters shall be provided.

10.14 HOT WATER STORAGE TANKS

Provide Adamson tank, or approved equal, complete with following features:

- 1) Concrete lined steel construction, ASME rated for 10.2 Atmospheres (150 psi) working pressure, ready for field insulation
- 2) Temperature-pressure relief valve, ASME rated
- 3) Anode rods
- 4) Access manhole
- 5) Steel saddles, legs or sub-base
- 6) Tappings of size and locations required
- 7) Provide drain valve with hose bib.

10.15 PLUMBING PIPING and EQUIPMENT INSULATION

- a) Insulate all plumbing components and piping specified below.
- b) Apply only over clean, dry metal.
- c) Insulate all fittings, valves, etc., other than unions, with neatly tapered and finished edges. Continue uninterrupted through floors and walls with sleeves and escutcheons.
- d) Potable Cold Water, 49C (120F) Hot Water, and 49C (120F) Hot Water Return Lines:
- e) Insulate cold water and hot water lines with 3/8" FR/elastomeric thermal insulation, using <u>identical material</u> at fittings with all seams adhered with 520 adhesive. FR/elastomeric thermal insulation must be labeled "Fire Retardant".

10.16 TESTING AND COMMISSIONING

10.16.1 The Contractor shall test all piping systems in accordance with IPC International Plumbing Code. The final test shall include a smoke test for drainage and vent system and pressure test for the domestic hot and cold-water

- piping. After completing the work, the Contractor shall demonstrate that all plumbing systems operate to fully satisfy the function for which these systems have been designed. The Contractor shall test, adjust, balance and regulate the system and its controls as necessary until the required designed conditions are met.
- 10.16.2 Test all hot and cold water piping at not less than 125 psig. Do not apply insulation prior to completion of pressure testing. Testing is to be applied in whole or in parts, as directed by Resident Engineer. Notify Engineer of readiness to perform testing 48 hours in advance and perform the same in presence of Engineer.
- 10.16.3 After system testing, completely flush all piping with water to remove all foreign materials.
- 10.16.4 Provide all tools and equipment required for testing and make all temporary required connections. Promptly notify Engineer of any defects developed during testing and, if piping was provided under this contract, repair leak and repeat test to prove installation tight. No caulking of screwed joints, cracks or holes permitted. Repair leaks if required in screwed joints by replacing defective pipe, fittings, or both, with new material.
- 10.16.5 Adjust all components of plumbing system to obtain proper water flow, water temperature and elimination of noise and vibration.
- 10.16.6 Specific attention is directed to obtaining approval from local inspectors and Engineer of all plumbing piping prior to concealment. Failure to do so may require reopening of construction when directed by Engineer. All such work of opening and closing, if required, to be executed to the satisfaction of Engineer and be paid for by this Contractor without cost to Owner.
- 10.16.7 The Contractor shall include tests for interlocks, safety cutouts and other protective devices to demonstrate safe operation. All such tests shall be carried out in the presence of the Engineer and full written records of the test data and final settings shall be submitted to the Contracting Officer. After all tests are complete, the entire domestic hot and cold water distribution system shall be disinfected.
- 10.16.8 Sterilize the entire water distribution system thoroughly with a solution containing not less than 50 parts per million of chlorine. Chlorinating material shall be either liquid chlorine conforming to U.S. Army Specification 4-1, or sodium hypochlorite solution conforming to Federal Specification O.B. 441a, Grade D, and shall be introduced into the system in an approved manner. The Sterilizing solution to remain in the system for a period of eight (8) hours, during which time all valves and faucets shall be opened and closed several times. After sterilization, flush the solution from the system with clean water until the residual chlorine content is not greater than 0.2 parts per million.
- 10.16.9 The system shall not be accepted until satisfactory bacteriological results have been obtained.

10.17 SPECIALTIES

- 10.17.1 Mirrors, .6m x .9m, 6mm plate glass, shall be mounted above all lavatories. Mount bottom of mirrors 1.1m above finished floor.
- 10.17.2 Toilet paper holders, stainless steel, shall be installed in the Western Toilet stalls, if provided. Toilet paper holders, stainless steel, shall be installed approximately 20 cm above floor in Eastern Toilets.
- 10.17.3Shower curtail rods, stainless steel, heavy duty, 18 gauge shall be mounted between the screen walls of each shower stall. Mount rod at 2.0m above finished floor. Provide a shower curtain with support rings for each shower stall.
- 10.17.4 The Contractor is to orient all of the latrines in this contract in such a way that all toilets face North/South.
- 10.17.5 Provide and install propane burning cooking stoves and chimneys as shown on drawings. Stove is to be site built of masonry and faced with terrazzo tiles color to match flooring SEE SECTION 01010 for other stove requirements.

- 10.17.6 Provide 1.9mm (14 gauge) stainless steel dish table. Provide 2cm rolled front rim on 3cm high drip guard on front and sides. Provide 25cm high rear splash. Legs shall be 3cm diameter, 1.6mm (16-gauge) stainless steel with adjustable feet. Sinks are integral 50cm x 50cm x 30cm deep, 5 each. Provide spray hose next to each set of sinks.
- 10.17.7 Provide 9 each, 14 gauge stainless steel worktables. Front and rear to have bull nose edges with square ends. Legs are 3cm diameter, 16-gauge stainless steel with adjustable feet. Provide under shelf. Tables are 90cm x 300 cm.
- 10.17.8 Provide 40 each sets of stainless steel open slotted shelves, 1.9mm (14 gauge). Each set of shelves is 100cm wide x 50cm deep x 1.8m high, 4 tier, with 3cm diameter adjustable stainless steel legs. Shelves are adjustable. Provide 8 of the sets with lockable 12.5cm diameter swivel rolling casters.
- 10.17.9 Provide and install cold storage rooms
- 10.17.10 Contractor shall provide the Contracting Officer shop drawings for approval of appropriately sized walk-in refrigerators and freezer to include proposed manufacturer, construction details, manufacturer's instructions, evacuation and charging procedures, operation and maintenance date, start-up and initial operational tests.
- 10.17.11 Walk-in coolers shall be panel type modular construction. Doors shall be swing type. Refrigeration equipment shall be remote located on the exterior of the building. Provide a temperature/ alarm system. Provide interior lighting with exterior switch. Floors of cool rooms shall be insulated panelized construction from the manufacturer of the cool rooms. The concrete floor will not be depressed.
- 10.17.12 Refrigeration piping shall be annealed or hard drawn seamless copper tubing in conformance with ASTM B280. Refrigeration systems shall be remote type. Provide security fence or wall to protect outside refrigeration units.
- 10.17.13 Electrical characteristics shall match local power 400v/3ph/50Hz and 220v/1ph/50Hz.
- 1. 3.12.9.5 Preservation and packing shall be commercial grade.
- 2. 3.12.9.6 Provide a recording thermometer.
- 3. 3.12.9.7 Provide temperature alarm with connector to remote temperature alarm.
- 4. 3.12.9.8 Provide outdoor condensing unit cover and security fence or wall to protect outside units. Provide condensing unit outdoors controls for operation down to −18 degrees C ambient temperature.
- 10.17.14 Refrigeration Equipment: Refrigeration equipment shall be designed for remote installation. Design units for 16 to 18 hour operation at the indicated interior temperature in –18 degree C ambient temperature. Capacities, air delivery, and dimensions shall be as indicated. Remote condensing units shall be factory fabricated and rated in accordance with UL303 and ARI 365. Provide with motor, air cooled condenser, receiver, compressors, mounted on a common base. Compressors shall be hermetic type. Evaporators shall be factory fabricated and rated in accordance with UL 412 and ARI 420. Forced convection, unit cooler type, made to suspend from the ceiling panels, with forced air discharged parallel to the ceiling. Provide with air circulating motor, multifin tube type coil and grille assembled within a protective housing. Air circulation motors shall be lifetime sealed, and the entire unit-cooler assembly shall be accessible for cleaning. Provide a drip pan and drain connection. When the cold storage room is used for freezing, provide an automatic electric heat defrosting system. Provide a timer type defrost controllers.
- 10.17.15 Provide condensate drain lines and drains below freezer floors with electric heating cable, thermostatically controlled to maintain 10 degrees C at zero flow rate. Cable shall be sized in accordance with manufacturer's recommendations.
- 10.17.16 Submit a copy of installation instructions to the Contracting Officer covering both assembly and installation of the refrigeration equipment prior to start of work. Start up and initially operate the systems upon completion of the installation of the equipment and refrigerant piping. Adjust the safety and automatic controls to place them in operating sequence. Record manufacturer's recommended readings hourly. Operational test shall cover a period of not less than 24 hours. Upon completion of Operational test the systems shall be performance tested. Test duration shall not be less than 8 hours. Test shall include the following information to be in the report with conclusions regarding the adequacy of the systems:

Time, dates and duration of tests:

- . Inside dry-bulb and wet-bulb temperatures maintained in each room during the tests employing recording instruments calibrated before the tests.
- . Outside dry-bulb and wet-bulb temperatures obtained from recording instruments calibrated and checked hourly with a sling psychrometer.
- . Evaporator and condenser entering and leaving temperatures taken hourly with the compressors in operation.
 - The make, model, and capacity of each evaporator and condensing unit.
- Voltmeter and ammeter readings for condensing units and evaporators.

10.17.17 Provide chart showing the layout of the refrigeration systems, including piping, valves, wiring, and control mechanisms. Submit printed instructions covering the maintenance and operation of refrigeration equipment. Tag shutoff valves in accordance with the instructions. Provide any special tools necessary for repair and maintenance of the systems.

10.17.18 Remove any packing material. Wash and clean floors, walls, ceilings and equipment inside of cool rooms. Wash and clean exposed surfaces on outside.

10.17.19 Upon completion of the work and at a time designated by the Contracting Officer, provide instruction to designated personnel in the operation and maintenance of each refrigeration system. The period of instruction shall not be less than one 8-hour day.

10.17.20 Provide tables and seating for 1000 people in the dining facility.

11.0 GEOTECHNICAL

11.1 Site Specific Information.

Site specific geotechnical information necessary to design and construct the foundations, pavements and other geotechnical related items contained in this project shall be the contractor's responsibility. The contractor shall determine all necessary geotechnical conditions by appropriate field and laboratory investigations and supporting calculations.

11.2 Geotechnical Report.

The contractor shall produce a detailed geotechnical report containing field exploration and testing results, laboratory testing results, evaluations, recommendations, calculations and descriptive supporting text. Information in the report shall include, but not limited to: existing geotechnical (e.g. surface and subsurface) conditions, location of subsurface exploration logs, exploration point, foundations selected, bearing capacity, pavement design criteria (e.g. CBR values, K values), and construction materials (e.g. concrete cement, asphalt, and aggregates). Two copies of the detailed geotechnical report shall be submitted to the Contracting Officer.

11.3 Geotechnical Qualifications.

A geotechnical engineer or geotechnical firm responsible to the contractor shall develop all geotechnical engineering design parameters. The geotechnical engineer or geotechnical firm shall be qualified by: education in geotechnical engineering; professional registration; and a minimum of ten (10) years of experience in geotechnical engineering design.

11.4 Design Certification.

The contractor shall certify in writing that the design of the project has been developed consistent with the site-specific geotechnical conditions. The certification shall be stamped by the geotechnical engineer of the geotechnical firm and shall be submitted with the final design.

12.0 GENERAL ELECTRICAL DESIGN

The following codes should be used as guidelines for the design of the electrical systems required by this project Foreign Voltages and Frequency Guide, TM 5-688

Facilities Engineering, Electrical Interior Facilities, TM 5-683

Facilities Engineering, Electrical Exterior Facilities, TM 5-684

National Fire Protection Association (NFPA most current addition)

National Fire Protection Association Section 70 - National Electrical Code (NFPA 70 2005)

National Electrical Safety Code (NESC)

Applicable model or local codes, whichever is more stringent.

12.1 SITE ELECTRICAL DESIGN

12.1.1 Site System design.

Provide new electrical primary distribution system and connect to all facilities identified in the Master Plan to include awarded options. System shall be a radial system. Primary feeder cables shall be copper, with ethylene-propylene-rubber (EPR) insulation. High voltage conductors shall have a 133% insulation level and protective shielding. Cable markers shall be installed along the length of direct-burial cable runs to identify their routes from the surface. Markers will be provided at changes of direction and at intervals not to exceed 500 ft. The electrical on-site distribution system shall be designed in compliance with the NFPA 70, National Electrical Code, or all applicable local codes, whichever is more stringent. Underground direct-burial distribution is required, except cables will be installed in concrete encased ducts under paved traffic areas (including driveways), unless otherwise directed. Paved areas shall be cut and patched with like materials.

12.1.2 Underground splices

Underground connection or splices are prohibited, except in boxes or manholes. Splices shall be in a self-draining, rodent -resistant box with a cover.

12.1.3 Service Laterals

New electrical service laterals shall be extended to ALL buildings on the campus currently being served by the electrical system. Where feasible, connect directly to the original service equipment until the interior electrical distribution system is to be renovated. Where the location of the new service is not in the same location, provide a fused, service rated disconnect switch at the new service location and extend a temporary secondary feeder inside the building to the existing service location.

All new services shall be 380 volt, three phase, four wire systems capable of providing a minimum of 400kva to each building.

12.1.6 Service Laterals over current protection

The building service laterals shall be sized according to the calculated demand load expected plus 25% spare capacity.

12.1.7. Service Laterals Voltage Drop

The service lateral shall be sized to prevent a voltage drop exceeding 3 percent at the farthest outlet of power, heating, and lighting loads, or combinations of such loads in each building.

12.1.8. Over current Protection Coordination

Where there are two or more series protective devices between the fault point and the power supply, these devices shall be coordinated to insure that the device nearest the fault point will operate first. The other upstream devices must be designed to operate in sequence to provide back-up protection.

12.1.9 Calculations

Calculations shall be provided for sizing of generators, high voltage feeders, branch circuits and circuit breakers; voltage drop calculations on feeders and branch circuits; short circuit current analysis for proper selection of equipment; and lighting calculations. Voltage drop shall be limited to 5% maximum from the source (transformer) to the final load. Power supply load analysis shall be based on the facilities square footage, watts per sq ft. for

general lighting and power loads and heating loads for each facility. Load analysis shall be provided on a spreadsheet.

12.1.10 Emergency/Standby Generators

Voltage regulation shall be plus or minus 0.5 percent for any constant load between no load and rated load for both parallel and non-parallel applications. Random voltage variation with any steady load from no load to full load shall not exceed plus or minus 0.5 percent.

Frequency regulation shall be isochronous from steady state no load to steady state rated load. Random frequency variation with any steady load from no load to full load shall not exceed plus or minus 0.25%.

The diesel engine-generator set shall be capable of single step load pick up of 100% nameplate kW and power factor, less applicable derating factors, with the engine-generator set at operating temperature.

The alternator shall produce a clean AC voltage waveform, with not more than 5% total harmonic distortion at full linear load, when measured from line to neutral, and with not more than 3% in any single harmonic, and no 3rd order harmonics or their multiples.

The generator set shall be certified by the engine manufacturer to be suitable for use at the installed location and rating, and shall meet all applicable exhaust emission requirements at the time of commissioning.

The generator set shall share real and reactive load proportionally within plus or minus 3% with all other generator sets in the system.

The time required to automatically start, accelerate to rated speed and voltage, synchronize and parallel all generator sets to the system bus on a normal power failure shall not exceed 15 seconds, assuming that the generator sets are in an ambient temperature of 40F or greater, and water jacket heaters are operating properly.

The voltage regulation system shall include provisions for reactive load sharing and electronic voltage matching for paralleling applications. Motorized voltage adjust pot is not acceptable for voltage matching.

Block heaters and fuel pre-heaters shall be provided and maintained in working order.

12.1.10.1 Generator System On-Site Acceptance Test:

The complete installation shall be tested for compliance with the specification following completion of all site work. Representatives of the manufacturer shall conduct testing, with required fuel supplied by Contractor. The Engineer shall be notified in advance and shall have the option to witness the tests.

Installation acceptance tests to be conducted on-site shall include a "cold start" test, a two-hour full load test, and a one step rated load pickup test in accordance with NFPA 110. Provide a resistive load bank and make temporary connections for full load test, if necessary.

Perform a power failure test on the entire installed system. This test shall be conducted by opening the power supply from the utility service, and observing proper operation of the system for at least 2 hours. Coordinate timing and obtain approval for start of test with site personnel.

12.2 DESIGN – ELECTRICAL INTERIOR

12.2.1 SERVICE DESIGN

12.2.1.1 Service Entrance.

Service entrances and building service panels shall be located inside the building in dedicated electrical rooms. Service feeders shall be underground to the point of the service locations. Service disconnects shall be located at the entrance of the underground service laterals. Emergency distribution services shall be located, as close to the Unit panel boards shall be painted galvanized steel and furnished with main breakers. Panel board doors shall be flush

one-piece fronts. Panel boards may be surface or recessed mounted depending on their location. In hallways, panel boards shall be recessed. Offset a minimum of 16 inches horizontally back-to-back panel boards. No recessed panel boards are to be located in party walls and fire walls. Electrical panels are to be provided with 20% spare circuit breakers.

- 12.3.2. The general lighting design is specified in the Scope of Work Section. The lamping of these fixtures shall meet the following minimum standards the minimums referred to shall be the mean value in the room with no more that a 4:1 max to min ratio. All fixtures are to be provided with lamps installed and one spare to be provided to the Owner.
- 12.3.3. Efficiency. Interior lighting will be both efficient and color corrected. Color Rendering Index (CRI) of 85 or better and a standard lighting color of 3500 K are required. The use of 4' Fluorescent tubes and Compact fluorescent lamps is recommended.
- 12.3.4. Locations. Provide fixture for fixture replacement of the original lighting system. The design shall select the light fixtures based upon the room use requirement. The fixtures will be controlled in same manner as the original design.

12.4 Devices

12.4.1. Interior devices, receptacles:

There shall be a one for one replacement of all receptacles and switches. All receptacles shall be rated for the in kind application. General purpose receptacles shall be grounded (earthed) type, "flush" or "semi-flush" wall mounted type (for new construction; surface mounted is satisfactory for renovated areas), color ivory and installed 500 mm above finished floor (AFF). In office or similar areas receptacles shall be provided at every 2 to 3M intervals, but no less than one (1) per each wall in small offices or areas. In industrial buildings / warehouses receptacles shall be provided at 5M interval or at each vehicle maintenance bay. CEE Type receptacles with plugs (2P+E (240v) or 3P+E (380v) and with appropriate rating, shall be provided for, but not be limited to, washers, dryers, kitchen equipment and any other type of large plug-able equipment. Receptacle shall be complete to include box, cover plate and necessary screws/connectors and of the type most commonly used in Afghanistan. Receptacles near sinks or lavatories shall be switch operated and Ground Fault Circuit Interrupter (GFCI), or Residual Current Disconnect (RCD) type, with the trip setting of 30 milliampere or less.

12.4.2. Interior devices, toggle switches:

Toggle Switches, single-pole single-throw, double-pole single-throw, quad-pole single-throw, shall be rocker style and motor-rated, 250 volt, and rated for the ampacity or the circuit.

Light switch shall be single pole. Minimum of one light switch shall be provided in every room. Lighting in large rooms/areas may be controlled from multiple switches. Lighting contactors may be used to operate lighting in open or large bay areas.

12.4.3 Existing equipment connections

All existing to remain equipment shall be disconnected, and reconnected with like rated starters, disconnects (fused or non-fused), etc. The design shall be completely coordinated between all trades and no electrical equipment installed by other trades shall be left unconnected to the electrical distribution system

12.4.4 New equipment connection

All new equipment provided under this contract or by others connected with properly sized and rated equipment (starters, disconnects (fused or non-fused), etc.). The design shall be completely coordinated between all trades and no electrical equipment installed by other trades shall be left unconnected to the electrical distribution system

12.4.5 Mechanical equipment (pumps, fans, controls, etc), passenger elevators, dumb waiters, etc.

Coordinate the reconnection of all replaced mechanical equipment to the requirements of the new equipment.

12.5 Light fixtures

The following list of fixtures is intended to indicate the level of quality and performance of the materials for the facility. Fixtures of the specified quality shall be provided.

- 12.5.1. Corridor and general-purpose lighting fixture, as manufactured by Day-Brite #OWN-232-UNV or approved equal. Two T8SPF35 fluorescent lamped, surfaced mounted, prismatic wrap around lens fixture with one two-lamp ballast. Battery back-up type light fixtures shall be installed to provide minimum lighting to allow safe movement during power outages.
- 12.5.2 Stairwell, storage, maintenance area fixture as manufactured by Day-Brite #SJ-232-UNV or approved equal. Two T8SPF35 fluorescent lamped, surfaced mounted, narrow, prismatic wrap around lens fixture, with one two-lamp ballast. Battery back-up type light fixtures shall be installed to provide minimum lighting to allow safe movement during power outages.

12.5.3. Lighting Fixture Type "E"

Emergency "EXIT" light fixture shall be single side and for wall/ceiling mounting. Unit shall illuminate continuously and Unit shall have test/re-set and lamp failure indication buttons. Primary operating voltage shall be 240 volts. Furnish fixture with minimum 8-watt fluorescent lamp. Lettering "EXIT" in Dari/Pashto shall be color red and not less than 150 mm in height and on matte white background.

- 12.5.4 Provide Pole mounted lighting fixtures at Running Track for night time use. Lighting level around track shall be 20 foot candles.
- 12.6. Wire and conductors
- 12.6.1 Conductors.

Conductors shall be copper; insulation shall be rated for the application. Sizes smaller than 6mm2 shall be solid. Sizes 6mm2 and larger shall be stranded. All cable and wire conductors shall be copper. Conductor jacket or insulation shall be color coded to satisfy local utility requirements.

12.6.2 Cable assemblies:

A factory assembly of one or more insulated circuit conductors enclosed in an armor of interlocking metal tape, or smooth or corrugated metallic sheath. Use of Multi-wire Branch Circuits. Where separate branch circuits are required to equipment loads, those branch circuits shall be "Individual Branch Circuits". "Multi-wire Branch Circuits" may not be used. Unless used as a feeder to a multi-phase load or panel, no more than, one conductor per assembly. The use of metal-clad, surface mounted wire assemblies shall be used and attached to the wall at no greater than 0.5 meter with a loop, single screw cable support. The use of nonmetallic-sheathed cable shall not be permitted.

12.6.3 Mounting options: channel walls, conceal assembly and patch to match the original wall surface.

12.7 GROUNDING AND BONDING

Grounding and bonding shall comply with the requirements of NFPA 70. Underground connections shall be exothermal welded. All exposed non-current carrying metallic parts of electrical equipment in the electrical system shall be grounded. Insulated grounding conductor (separate from the electrical system neutral conductor) shall be installed in all feeder and branch circuit raceways. Grounding conductor shall be green-colored, unless the local authority requires a different color-coded conductor. Ground rods shall be copper-clad steel. Ground resistance shall not exceed 25 ohms when measured less than 48 hours after rainfall.

12.8 SINGLE LINE DIAGRAM

Complete single line diagram shall be provided in every transformer distribution panel and in Main Distribution Panel in each building. Single line diagram shall show all panels serviced from the transformer distribution panel and the MDP respectively.

12.9 COMMUNICATION TOWER INSTALLATION

The contractor shall provide all labor, supervision, transportation, equipment and other items and services necessary to integrate, implement, upgrade, and install the antenna towers. Services shall include project management and systems engineering services in support of the engineering design, equipment installation, and optimization, acceptance testing and maintenance support for the antenna towers. The height of the antennas shall be determined by site locations and point to point plots based on line of sight determinations.

System Integration Overview: The systems integration process begins with the identification and understanding of customer operational requirements and continues through system design, installation, testing, and final acceptance. Systems integration process combines all of these activities into a cost-effective, productive, and efficient effort that meets operational and functional requirements as specified by the customer. The services proposed in this SOW and described below will begin with the receipt of a contract and progress in accordance with a schedule mutually agreeable to the MoD and the Regional Command sight visits and engineering surveys.

Standards of Work: The tower installation contract will provide a vehicle to meet specific urgent requirements that support full radio transmission via microwave technology with expansion capability. The tower's capability must be fully capable of providing larger bandwidths as communications needs grow. This includes the proper height, weight and functionality to add multiple transmitting antennas. It also includes the establishment of the tower's maintenance for the first year. This system is a commercially procured steel antenna tower system designed for the Afghan MoD and the Afghan National Army's regional commands. All antennae and towers erected, constructed, or located within Afghanistan, and all wiring therefore, shall comply with the following requirements:

- (1) All applicable provisions of this Statement of Work.
- (2) Towers shall be certified by a qualified and licensed professional engineer to conform to the latest structural standards and wind loading requirements of the International Uniform Building Code and the Electronics Industry Association.
- (3) Any antenna or antenna mounting structure, or part thereof placed in the public right-of-way as defined by the Civil Aviation authority must receive an appropriate right-of-way permit issued through the local departments and must comply with the requirements in civil aviation regulations and communications standards within the Afghan's Ministry of Communications.
- (4) Towers and associated antennas shall be designed to conform with accepted electrical engineering methods and practices and to comply with the provisions of the National Electrical Code.
- (5) All signal and remote control conductors of low energy extending substantially horizontally above the ground between a tower or antenna and a structure, or between towers, shall be at least eight feet above the ground at all points, unless buried underground.
- (6) Every tower affixed to the ground shall be protected to discourage climbing of the tower by unauthorized persons.
- (7) All towers shall be constructed to conform to the requirements of the Occupational Safety and Health Administration.
- (8) No tower shall be in excess of a height equal to the distance from the base of the antenna and tower to the nearest overhead electrical power line which one dwelling or place of business, less than two meters.
- (9) Metal towers shall be constructed of, or treated with, corrosive resistant material.

<u>Antenna Requirements</u>: The following explains the minimum requirements of the antenna specifications. The antenna erection will comply with common safety requirements as outlined in the Occupational Safety and Health Administration's (OSHA) instruction, CPL 02-01-034 - CPL 2-1.34. (http://www.osha.gov/pls/oshaweb/).

- tile up to 2m above finished floor. Floor in Dining area shall be painted concrete. Color of paint shall be selected by the Contracting Officer from color board provided by the Contractor.
- 7.0.11 Paint all exposed exterior steel trim, frames, doors and pipe railings with one coat oil-based primer, with 2 coats of oil-based alkyd gloss enamel. Color shall be selected by the Contracting Officer from color board provided by the Contractor.
- 7.0.12 Paint all exposed wood trim, frames, and doors with 2 coats of gloss enamel, Color of flat white shall be selected by the Contracting Officer from color board provided by the Contractor
- 7.0.13 Floor finish in wet areas shall be concrete finish, except in bathrooms, ablution and shower rooms. Bathroom, ablution, and shower floors shall be covered with floor tiles. Bathroom, ablution, and shower floor slope shall be obtained with sloping mortar bed of 2cm min thickness. Provide minimum 30 mm per 1000 mm slope to bathroom and shower floor drains. Remove existing mortar setting bed or provide curb at room entrance to contain slope within bathroom and shower wet room. Color of ablution, bathroom and shower tile shall be selected by the Contracting Officer from color board provided by the Contractor
- 7.0.14 Walls in wet areas (toilet rooms, shower rooms, and ablution rooms) shall be tiled with 150mm x 150mm glazed ceramic tile up to 2 meters above the floor to include interior of toilet stalls, ablution, showers and behind sinks. Joints shall be 2-3mm. Waterproof grout shall be applied full depth of the tile. Grout shall cure for 72 hours and then be sealed with a commercial grout sealant in two coats. Color of tile shall be selected by the Contracting Officer from color board provided by the Contractor.

8.0 MATERIALS

The followings are few typical American Standards. The Contractor should use these standards to provide sound structural design if local standards are not available, relevant, or applicable. The Contractor shall follow American Concrete Institute Standards for design and installation of all concrete structures.

Concrete 210.0 kg/sq.cm cylinder strength @ 28 days. Steel Reinforcements 4218.0 kg/sq.cm (Fy = 60.0 ksi) yield strength.

Welded Wire Fabric ASTM A185

Anchor Bolts ASTM A307 using A36 steel.

Concrete Masonry Units ASTM C90, Type I (normal wt, moisture Control).

Mortar ASTM C270, Type S

Grout ASTM C476

Joint Reinforcements Standard 9-gage minimum, Ladder Type Structural Steel. ASTM A36: 2530.0 kg./sq.cm (Fy

= 36,000psi)

Welding: AWS (American Welding Society) D1.1-2002.

10.0 MECHANICAL

10.1 SCOPE OF WORK

Refer to Section 1010 for a description of the HVAC systems, plumbing system, fire protection system, and special mechanical system requirements for specific buildings.

10.1.1 General

10.1.1.1 The Contractor shall design, supply, fabricate and install new heating ventilation, exhaust and air conditioning systems (HVAC), plumbing, fire protection, and special mechanical systems, or part these of, as described in Section 01010 Scope of Work, and as described herein.

10.1.1.2 Subcontractor Qualifications

- Antenna tower system component service manuals
- Antenna tower system manual to include:
- Antenna tower system block diagram(s)
- Antenna tower "as-built" system documentation
- Antenna tower system architecture description
- Antenna tower floor plan if applicable
- Antenna tower system acceptance test plan and report

Implementation Services:

- <u>Delivery Period:</u> The final system acceptance and all related documentation shall be completed no later than 90 days after contract award.
- The Contractor shall identify key milestones for the final design, integration, installation and testing of the tower system. The milestones shall be described with reference to days after contract award. The schedule can include, but may not be limited to final acceptance walk through.

Formal system acceptance shall be granted after completion of the acceptance walk through and successful 30-day equipment satisfaction period.

Contractor's Responsibilities:

- Ensure height of antenna will be sufficient to support line of sight communications as predetermined between locations a and b of the communications links
- Verify the integrity of the antenna support system and load bearing capability
- Install antenna system equipment as listed in the antenna system equipment list
- Grounding system equipment adequate as defined in the telecommunications standards and guidelines for communications sites
- Install antennas and associated transmission lines as identified in the system equipment list
- Provide access to all buildings, equipment shelters, and towers required to complete this SOW
- Provide antenna site perimeter security fences with gates for maintenance vehicles
- Conduct any required environmental impact assessments
- De-install and remove existing system antennas, cables, and equipment, not needed for new antenna tower installation
- Provide primary electrical power at all sites
- Furnish and install all necessary electrical work such as power, HVAC, AC and/or DC circuits and outlets, circuit breakers, and main service protectors
- Provide uninterruptible power supplies (UPSs) and backup generator, or other suitable sources of emergency power at all system equipment locations
- Provide HVAC as specified
- · Furnish and install exterior and internal grounding systems at all system equipment shelters and buildings
- Measure and verify ground resistance of five ohms or less
- Furnish and install cable routing trays as specified
- Furnish antenna-mounting space on existing towers as specified
- Furnish and install new towers or tower extensions as required and specified
- Conduct tower analysis, as required
- Furnish and install tower grounding system
- Furnish and install tower lighting as required
- Furnish and install exterior cable/ice bridge as required and specified
- Assist in the verification the integrity of customer provided microwave links, T1 circuits, fiber links, and telephone lines
- Provide equipment system equipment warehousing, storage as required
- Ensure a service phone is available at all sites

<u>Hours Of Operation</u>: Installation work will be performed during normal business hours, Saturday through Thursday, 7:30 a.m. to 4:30 p.m., excluding normal holidays observed by the Government.

<u>Warranty</u>: The Contractor shall provide their standard commercial parts and equipment and installation warranty. Warranty services will include repair service for the first year.

<u>Operations/Technical Manuals</u>: Contractor provides technical manuals for all aspects of tower maintenance and safety, to include safety of personnel climbing towers and ensure safety apparatus equipment for climbing personnel.

12.10 SUBMITTAL REQUIREMENTS

General: Design shall be submitted for review at two (2) stages of the design. First submittal shall be required at the "Concept" stage of the design (35%), and the second (Final) (95%) submittal shall reflect the completed design. Submittal requirements for the concept and the final stages of the designs are noted below.

The catalog cuts shall be provided for all types of equipment to be installed under this contract. Cuts shall include the manufacturers name, address and the telephone number; rating and physical size of equipment; and the standard it meets, such as DIN, BS, or UL. Equipment or device selected by the designer shall be identified on a catalog cut which lists multiple items.

12.11 AS-BUILT DRAWINGS

Upon completion of the contract work, Contractor shall provide five (5) sets of "As-Built" condition drawings. The drawings shall show the overall site, work completed under this contract and buildings identified for future construction.

12.12 SPARE PARTS AND CONSUMABLES

The Contractor will not be responsible for providing any spare parts or consumables for any equipment furnished and installed under this contract except for those items required to perform testing and commissioning.

12.13 Drawings

Drawings shall show approximate location of the site distribution transformer(s), power and lighting floor plans showing panels, load centers, switches, receptacles and smoke detectors, emergency lights, exit signs, fire alarm control panel and related devices on a floor level. Exterior drawing(s) shall also show routing of the utilities, street and area light pole locations and distance between poles.

12.14 Specifications

Contractor shall provide separate specifications for each system to be provided under this contract. Specifications shall indicate applicable design standards and criteria followed, standards that the selected equipment and material shall comply with, method of equipment installation, and other construction requirements that the designer may see fit

12.15 Final Submittal

Final submittal shall consist of the concept submittal requirements (design drawings and design analysis) updated to reflect final design development and incorporation of review comments.

12.16 OPERATION & MAINTENANCE (O&M) MANUALS

Contractor shall furnish minimum of 5 sets of O&M manuals on each system to the Contracting Officer. Manuals shall contain manufacturer's full name, address and telephone numbers. Language for all manuals and documents shall be in American English and Dari.

--- End of Section ---

SECTION 01060

SPECIAL CLAUSES

PART 1 GENERAL

1.1 PRECONSTRUCTION CONFERENCE

1.1.1 Schedule of Meeting

At the earliest practicable time, prior to commencement of the work, the Contractor and any Subcontractors whose presence is necessary or requested, shall meet in conference with representatives of the Contracting Officer to discuss and develop a mutual understanding relative to the details of the administration and execution of this contract. This will include but not necessarily be limited to the Contractor's Quality Control (CQC) Program, the Contractor's Accident Prevention Program, submittals, correspondence, schedule, access to the work site, security requirements, interface requirements, temporary facilities and services, hazards and risks, working after normal hours or on weekends or holidays, assignment of inspectors, representations, special requirements, phasing and other aspects of this project that warrant clarification and understanding.

1.1.2 Meeting Minutes

It shall be the responsibility of the Contractors CQC System Manager to prepare detailed minutes of this meeting and submit same to the Contracting Officer for approval within three (3) work days. Any corrections deemed necessary by the Contracting Officer shall be incorporated and resubmitted within two (2) calendar days after receipt. Upon approval of the minutes by the Contracting Officer, the Contractor shall distribute the minutes to all parties present or concerned.

1.2 AREA USE PLAN

The Contractor shall submit to the Contracting Officer, within twenty (20) calendar days after Notice to Proceed, an Area Use Plan designating intended use of all areas within the project boundaries. This plan shall include, but not necessarily be limited to the following: the proposed location and dimensions of any area to be fenced and used by the Contractor; construction plant and building installations/the number of trailers and facilities to be used; avenues of ingress/egress to the fenced areas and details of the fence installation; drawings showing temporary electrical installations; temporary water and sewage disposal installations; material storage areas; hazardous storage areas. Any areas, which may have to be graveled, shall also be identified. The plan shall also include a narrative description of the building structural system, the site utility system and the office or administration facilities. The Contractor shall also indicate if the use of a supplemental or other staging area is desired. The Contractor shall not begin construction of the mobilization facilities prior to approval by the Contracting Officer of the Area Use Plan described herein.

1.3 CONTRACTOR'S MOBILIZATION AREAS

1.3.1 General

1.3.1.1 Facilities Within the Mobilization Site

All facilities within the Contractor's mobilization site shall be of substantial construction suitable for the local weather conditions. Housing, messing and sanitary facilities shall meet the requirements of Corps of Engineers Safety and Health Requirements Manual EM 385-1-1. The Contractor shall provide all utilities required to make the site self-sufficient.

1.3.1.2. Trash Disposal: The Contractor shall be responsible for collection and disposal of trash from the work areas and from the mobilization area. All trash shall be disposed of off base in accordance with Host Nation requirements. Construction debris, waste materials, packaging material and the like shall be removed from the work site daily. Loose debris capable of being windblown, shall be immediately placed in sealed or covered containers. Any dirt or

soil which is tracked onto paved or surfaced roadways shall be cleaned daily. Materials resulting from demolition activities, which are salvageable shall be stored within the fenced area described above. Stored material not indoors, whether new or salvaged, shall be neatly stacked when stored.

1.3.2 CONTRACTOR'S MOBILIZATION AREA (ON-SITE)

The Contractor will be permitted to use the area designated by the Contracting Officer within the contract limits for operation of his construction equipment and plants, shops, warehouses, and offices. The Contractor may live on site, if needed, but shall provide all utilities required to make his living site self-sufficient. The Contractor is responsible for obtaining any required additional mobilization area above that designated. On completion of the contract, all facilities shall be removed from the mobilization area by the Contractor and shall be disposed of in accordance with applicable Host Government Laws and Regulations. The site shall be cleared of construction debris and other materials and the area restored to its final grade.

1.3.2.1 Administrative Field Offices

The Contractor may provide and maintain administrative field office facilities within the mobilization area at the designated site. Government office and warehouse facilities will not be available to the Contractor's personnel.

1.3.2.2 Storage Area

The Contractor shall construct a temporary 1.8 meter high chain link fence around trailers and materials. The fence shall include plastic strip inserts, colored green or brown, so that visibility through the fence is obstructed. Fence posts may be driven, in lieu of concrete bases, where soil conditions permit. Trailers, materials, or equipment shall not be placed or stored outside the fenced area unless approved in writing by the Contracting Officer.

1.3.2.3 Plant Communication

Whenever the Contractor has the individual elements of its plant so located that operation by normal voice between these elements is not satisfactory, the Contractor shall install a satisfactory means of communication, such as telephone or other suitable devices. These devices shall be made available, for use by Government personnel.

1.3.2.4 Appearance of Mobilization Site Facilities and/or Trailers

Mobilization Site Facilities and/or Trailers utilized by the Contractor for administrative or material storage purposes shall present a clean and neat exterior appearance and shall be in a state of good repair.

1.3.2.5 Maintenance of Storage Area

Fencing shall be kept in a state of good repair and proper alignment. Should the Contractor elect to traverse with construction equipment or other vehicles unpaved areas which are not established roadways, such areas shall be covered with a layer of gravel as necessary to prevent rutting and the tracking of soil onto paved or established roadways; gravel gradation shall be at the Contractor's discretion.

1.3.2.6 Security Provisions

Adequate outside security lighting shall be provided at the Contractor's temporary facilities. The Contractor shall be responsible for the security of its own personnel, facilities and equipment.

1.3.2.7 Sanitation

Sanitary Facilities: The Contractor shall provide and maintain within the construction area minimum field-type sanitary facilities in accordance with the requirements of EM 385-1-1 Safety and Health Requirements Manual and approved by the Contracting Officer. Government toilet facilities will not be available to Contractor's personnel.

1.3.2.8 Telephone

The Contractor shall make arrangements to install and pay all costs for telephone facilities desired.

1.3.2.9 Restoration of Storage Area

Upon completion of the project and after removal of mobilization facilities, trailers, materials, and equipment from within the fenced area, any fencing provided shall be removed and will become the property of the Contractor. Areas used by the Contractor for the storage of equipment or material, or other use, shall be restored to the original or better condition. Gravel used to traverse unpaved areas shall be removed and all such areas restored to their original conditions.

1.3.2.10 Protection and Maintenance of Traffic

During construction the Contractor shall provide access and temporary relocated roads as necessary to maintain traffic. The Contractor shall maintain and protect traffic on all affected roads during the construction period except as otherwise specifically directed by the Contracting Officer. Measures for the protection and diversion of traffic, placing of lights around and in front of equipment and the work, and the erection and maintenance of adequate warning, danger, and direction signs, shall be as required by the Host Nation and/or base authorities having jurisdiction. The traveling public shall be protected from damage to person and property. The Contractor's traffic on roads selected for hauling material to and from the site shall interfere as little as possible with Host Nation and/or base traffic. The Contractor shall investigate the adequacy of existing roads and the allowable load limit on these roads. The Contractor shall be responsible for the repair of any damage to roads caused by construction operations.

1.3.2.11 Use of Existing Roads as Haul Routes

The Contractor shall be responsible for coordinating with the Host Nation Government and the base authorities for use of any existing roads as haul routes. Construction, and routing of new haul roads, and/or upgrading of existing roads to carry anticipated construction traffic shall be coordinated with the Host Nation and Base authorities and is the sole responsibility of the Contractor.

1.3.2.12 Employee Parking

Contractor employees shall park vehicles in an area approved by the Contracting Officer. Contractor employee parking shall not interfere with existing and established parking requirements of the Afghan military personnel onsite.

1.3.2.13 Temporary Project Safety Fencing and Barricades

The Contractor shall impose all measures necessary to limit public access to hazardous areas and to ensure the restriction of workers to the immediate area of the construction and mobilization site. The Contracting Officer may require in writing, that the Contractor remove from the work any employee found to be in violation of this requirement.

1.3.2.14 Barricades

Barricades shall be required whenever safe public access to paved areas such as roads, parking areas or sidewalks is prevented by construction activities or as otherwise necessary to ensure the safety of both pedestrian and vehicular traffic. Barricades shall be securely placed, clearly visible with adequate illumination to provide sufficient visual warning of the hazard during both day and night. Travel to and from the project site shall be restricted to a route approved by the Contracting Officer.

1.3.3 CONTRACTOR'S MOBILIZATION AREA

The Contractor shall provide, furnish, operate and maintain facilities for his batching operations (e.g. concrete, asphalt, etc.) major shops and living facilities for his workers in an area approved by the Contracting Officer. The specific area must be located such that no new contractor facilities are within the "Inhabited Building Clear Zone"

(approximately 1355 meters, radius) surrounding ammunition/explosives storage and/or handling areas. The Contractor must submit his desired site location to the Contracting Officer for approval. All utilities will be the responsibility of the Contractor and shall be provided at no cost to the Government. On completion of the contract, all facilities shall be removed by the Contractor and shall be disposed of in the manner directed by the Contracting Officer. The site shall be cleared of construction debris and other materials and the area restored to its original condition.

1.3.4 SPECIAL REQUIREMENTS

The Contractor shall be responsible for coordinating with the Host Government use of any existing roads as haul routes. Construction and routing of new haul roads, and/or upgrading of existing roads for the Contractor's use, is the sole responsibility of the Contractor. It shall be the Contractor's responsibility to obtain such local authorizations, permits and licenses necessary to establish his mobilization camp, quarry operations, batching operations and haul routes.

1.4 NOT USED

1.5 RESPONSIBILITY FOR PHYSICAL SECURITY

Prior to mobilization, the Contractor shall submit his proposed means of providing project security to prevent unauthorized access to equipment, facilities, materials and documents, and to safeguard them against sabotage, damage, and theft. The Contractor shall be responsible for physical security of all materials, supplies, and equipment of every description, including property which may be Government-furnished or owned, for all areas occupied jointly by the Contractor and the Government, as well as for all work performed.

1.6 NOT USED

1.7 DUST CONTROL

The Contractor shall be required to control objectionable dust in the work areas, access roadways, and haul roads by means of controlled vehicle speeds or dust palliatives. Vehicles transporting sand, cement, gravel or other materials creating a dust problem shall be covered, as directed by the Contracting Officer, or in accordance with local Laws, codes, and regulations.

1.8 NOT USED

1.9 NOT USED

1.10 NOT USED

1.11 CONNECTIONS TO EXISTING UTILITIES

1.11.1 General

Any outage of any utility service shall be requested in writing at least fifteen (15) days in advance of the date requested for the commencement of the outage. The Contractor shall provide a request, detailing the type of outage needed (water, sewer, electrical, steam, etc.), the time needed to perform the work, the reason for the outage, and the known affected facilities. The Contracting Officer shall be contacted prior to the outage to confirm the time and date. If the Contractor fails to initiate work at the approved time, the Contracting Officer may cancel the approved outage and may direct the Contractor to resubmit a new request. No part of the time lost, due to the Contractors failure to properly schedule an outage, shall be made the subject of claim for extension of time or for excess costs or damages by the Contractor.

1.11.1.1 Performance of Work During Non-Standard Hours

To minimize outage impact to the mission of the intelligence command, all outages shall be scheduled on weekends or from 2100 - 0530 hours on duty days. The period proposed for performance of the outage shall include sufficient contingencies to preclude impact to the peak working hours 0530 - 1800 hours during the work week.

1.11.1.2 Exterior Night Lighting

Exterior night lighting shall be provided in conformance with EM-385-1-1 entitled Safety and Health Requirements Manual.

1.11.2 Existing Underground Utilities

The Contractor shall exercise the utmost care in researching locations of existing utility lines by implementing control measures to eliminate, or reduce to a level acceptable to the Contracting Officer, the chance of damaging or destroying existing utilities.

1.11.2.1 Use of Underground Utility Detecting Device

Prior to any excavation, a metal and/or cable detecting device shall be used along the route of the excavation. All underground utilities discovered by this method will be flagged a minimum distance of one-half (1/2) meter on each side of the location.

1.11.2.2 Hand Excavation

Hand excavation methods and special supervisory care shall be used between any flagged markers, in areas of known or suspected hazards, and in areas known or suspected to have multiple and/or concentrated utility lines or connections.

1.11.3 Repair of Damaged Utilities

The Contractor shall be responsible to repair any utilities damaged by him. The method of repair and schedule for performance of the repair shall be coordinated with, and subject to the approval of, the Contracting Officer. The repair work and any temporary work required to keep the system operational while repairs are being completed, shall be performed at no cost to the Government.

1.12 WATER (CONTRACTOR PROVIDED)

The Contractor shall provide and maintain water at his own expense for his use for construction and domestic consumption, and shall install and maintain necessary supply connections and piping for same, but only at such locations and in such manner as may be approved by the Contracting Officer. Before final acceptance of systems, or facilities, all temporary connections and piping installed by the Contractor shall be removed at his expense in a manner satisfactory to the Contracting Officer.

1.13 NOT USED

1.14 ELECTRICITY (CONTRACTOR PROVIDED)

Electrical service is not available for use under this contract, therefore all electric current required by the Contractor shall be the responsibility of the Contractor, furnished at his own expense. All temporary connections for electricity shall be subject to the approval of the Contracting Officer and shall comply with Corps of Engineers manual EM 385-1-1 entitled Safety and Health Requirements Manual. All temporary lines shall be furnished, installed, connected and maintained by the Contractor in a workmanlike manner satisfactory to the Contracting Officer. Before final acceptance of systems, or facilities, all temporary connections installed by the Contractor shall be removed at his expense in a manner satisfactory to the Contracting Officer.

1.15 NOT USED

1.16 USE OF EXPLOSIVES

The Contractor shall make necessary arrangements as may be required by applicable codes, rules, regulations and laws and shall be responsible for compliance therewith for all phases of blasting operations. When blasting is required for removal of rock or other material, the Contractor shall notify the Contracting Officer prior to application for any use of explosives and take all necessary precautions for the protection of individuals and property exposed to his operation.

1.16.1 Handling, Storage, and Use of Explosives

The handling, storage, and use of explosives shall be governed by the applicable provisions of the following: the "BLASTING" section of the Corps of Engineers Manuals EM 385-1-1, entitled Safety and Health Requirements Manual, a copy of which may be obtained from the Contracting Officer's Representative at the jobsite, and Technical Section 02201 entitled BLASTING.

1.16.2 Blasting Permits

The Government assumes no liability for changes that may be imposed by the Afghanistan Government.

1.17 NOT USED

1.18 WORK OUTSIDE REGULAR HOURS

If the Contractor desires to carry on work outside regular base duty hours, or on holidays, he shall submit an application to the Contracting Officer. The Contractor shall allow ample time to enable satisfactory arrangements to be made by the Government for inspecting the work in progress. At night, exterior lighting shall be provided in conformance with EM-385-1-1 entitled "Safety and health Requirements Manual".

1.19 SCHEDULING OF WORK IN EXISTING FACILITIES

As soon as practicable, but in any event not later than fifteen (15) calendar days after receipt of Notice to Proceed, the Contractor shall meet in conference with the Contracting Officer, or his duly authorized representatives, to discuss and develop mutual understanding relative to the scheduling of work in and access to the existing facilities where work has to be performed under this contract, so that the Contractor's proposed construction schedule is coordinated with the operating and security requirements of the installation. Construction at Bala Hissar will include both new construction and renovation work.

1.20 USE OF AFGHAN WORKFORCE

Private sector Afghan subcontractors and workers (to include, but not limited to, laborers and skilled tradesmen) will be used to the extent that each is capable of performing required work and that locally-produced Afghan materials and equipment be used to the extent that each can satisfy contract requirements, including all technical or other specifications.

1.21 NOT USED

1.22 SPECIAL FACILITIES AND SERVICES TO BE FURNISHED BY THE CONTRACTOR

The Contractor shall furnish the facilities and services listed in this clause for Corps of Engineers personnel and other persons as designated by the Contracting Officer at the G2 Intelligence and Headquarters Security Brigade project site. All facilities, furnishings, materials, and equipment shall be new or like new when furnished at the site. The Contractor shall fully maintain and repair all facilities, furnishings, and equipment listed below until contract completion. All facilities furnished and/or installed by the Contractor under this clause shall remain the property of the Contractor during the performance period of the contract and shall be turned over to the Government upon task order completion.

1.22.1 Field Office Facility

1-40'x40' (or equivalent) office to be located at the jobsite. The office shall include: desks/chairs for 5 people; 2 drawer file cabinets; a 6 person conference table with chairs; air conditioning and heating; 1-bathroom; 1-10CF or larger refrigerator; 1-microwave oven; 1-drafting table; and 1-copy machine. Contractor shall install blinds for all windows. Contractor shall be responsible for daily cleaning and for removal of all waste from the toilet facilities.

The field office facility shall become Government property upon completion of the contract and shall remain in place.

All facilities within this section as described above shall be completed and ready for Government use not later than 45 days after award of the contract.

- 1.22.2 Services for the Field Office Facility
- a. Maintain all utility systems required to support site office facilities.
- b. Provide all bottled water required for site office facility, including potable drinking water and operate and maintain the water system. All water provided will be treated to the degree as directed and approved by the Contracting Officer.
- c. Provide operation and maintenance of building structure, all furnishings and equipment contained therein, including painting and incidental repairs.
- d. Provide landscaping and dust control in area adjacent of the office.
- e. Provide vector control services, including insect and rodent control in the areas adjacent of office.
- f. Provide janitorial services in the office facility including cleaning of toilet and shower facility, furnishing of toilet tissue, soap and towels, emptying trash, vacuuming and dusting on a daily basis and all other cleaning of offices on a weekly basis, to the satisfaction of the Contracting Officer.
- g. Provide replacement parts such as locksets, washers, toilet floats, etc., that will be required for typical building repairs and maintenance.
- h. Provide a Communications Room in the COE office building for the electronics. The communications room size requirement is 10 feet (3.048 m) by 8 feet (2.438 m). Communication conduit entrance requirement is one 3 inch conduit with pull string. Conduit is to be trenched from the concrete satellite pad to the outside wall of the communications room. Conduit at satellite pad must be bent (see below) so that opening is pointed down (not up) with at least 12 inches clearance from the pad surface. Conduit enters the communications room above ground. Opening into the communications room should be at 18 inches above communications floor, horizontal entry. Conduit should be one piece, preferably galvanized steel, but if not possible, or is PVC is used, interior must be free of protrusions at the joints to allow smooth, non-cutting surfaces for the wire or fiber optics that will eventually be pulled through. Conduit is to be installed with a pull cord or pull wire. No bends greater than 45 degrees permitted. Each bend must continue through a minimum of 6 inches of straight pipe before the next bend. Conduit must be buried no less than 18 inches, 24 inches if there is a possibly of tank or other heavy equipment passage. Conduit is intended for communications only. If power is also to be run, it must be in a separate conduit, separated from the communications conduit by a minimum of 4 inches. Power conduit is not specified herein. Consult with the electrical engineer for requirements.

In office install raceways, run category five (5) or better Ethernet cable and terminate on RJ-45 connecting block arranged for 568B wiring at each workstation. Free ends are to be pulled and labeled into Communications Room and left unterminated with a minimum of 15 feet exposure inside the Communications Room.

1.23 NOT USED

1.24 NOT USED

1.25 PREPARATION OF AS-BUILT DRAWINGS (CONTRACTOR)

1.25.1 General

Upon completion of each facility under this contract, the Contractor shall prepare and furnish as-built drawings to the Contracting Officer. The as-built drawings shall be a record of the construction as installed and completed by the Contractor. They shall include all the information shown on the contract set of drawings, and all deviations, modifications, or changes from those drawings, however minor, which were incorporated in the work, including all additional work not appearing on the contract drawings, and all changes which are made after any final inspection of the contract work. In the event the Contractor accomplished additional work which changes the as-built conditions of the facility after submission of the final as-built drawings, the Contractor shall furnish revised and/or additional drawings and drawing files as required to depict final as-built conditions. The requirements for these additional drawings shall be the same as for the as-built drawings specified in this paragraph.

1.25.2 Preliminary As-Built Drawings

The Contractor shall maintain a full size set of contract drawings for depicting a daily record of as-built conditions. These drawings shall be maintained in a current, reproducible condition at all times during the entire contract period and shall be readily available for review by the Contracting Officer's Representative at all times. The as-built drawings shall be updated daily by the Contractor showing all changes from the contract plans which are made in the work, or additional information which might be uncovered in the course of construction. This information shall be recorded on the prints accurately and neatly by means of details and notes. Changes and additional information marked on the contract plans should be made in red or green color for highlighting purposes. The drawings shall show the following information, but not be limited thereto:

- a. The location and description of any utility lines or other installations of any kind or description known to exist within the construction area. The location includes dimensions to permanent features.
- b. The location and dimensions of any changes within the building or structure, and the accurate location and dimension of all underground utilities and facilities.
- c. Correct grade or alignment of roads, structures, or utilities if any changes were made from contract plans.
- d. Correct elevations if changes were made in site grading.
- e. Changes in details of design or additional information obtained from working drawings specified to be prepared and/or furnished by the Contractor including but not limited to fabrication, erection, installation plans and placing details, pipe sizes, insulation material, dimensions of equipment foundations, etc.
- f. The topography and grades of all drainage installed or affected as part of the project construction.
- g. All changes or modifications of the original design including those which result from the final inspection.
- h. Where contract drawings or specifications allow options, only the option actually used in the construction shall be shown on the as-built drawings. The option not used shall be deleted.
- i. In development of as-built drawings, the Contractor shall not substitute shop drawings for original contract drawings. All necessary information for as-built conditions shall be incorporated into contract drawings.
- j. One (1) copy of the preliminary as-built marked prints shall be delivered to the Contracting Officer at the time of final inspection of each facility for review and approval. Changes and additional information marked on the contract plans should be made in red or green color for highlighting purposes. If upon

review of the preliminary as-built drawings, errors or omissions are found, the drawings will be returned to the Contractor for corrections. The Contractor shall complete the corrections in red or green color, and return the as-built marked prints to the Contracting Officer within ten (10) calendar days.

1.25.3 Final As-Built Drawings

The Contractor shall update the digital contract drawing files to reflect the approved final as-built conditions and shall furnish those updated drawing files and plots of the final as-built drawings to the Contracting Officer.

- a. Only personnel proficient in the use of Computer Assisted Design and Drafting (CADD) for the preparation of drawings shall be employed to modify the contract drawing files or prepare new drawing files.
- b. Existing digital drawing files shall be updated to reflect as-built conditions. Independent drawing files containing only as-built information are not acceptable. The modifications shall be made by additions and deletions to the original drawing files, and where additional drawings are necessary, they shall be developed in individual digital files for each new drawing. All additions and corrections to the contract drawing files shall be clear and legible, and shall match the adjacent existing line work and text in type, size, weight, and style. New or revised information placed into the design files shall be placed on the levels and in the colors used for placement of the corresponding initial data. Similarly, the drawing size, title block, and general format of new drawings shall be consistent with the format established by the original drawings.
- c. In the preparation of as-built drawings, the Contractor shall remove "Bubbles" used by the Government to highlight drawing changes made during design/construction. Triangles associated with those earlier drawing changes shall be left on the drawings and the Contractor shall not add triangles to designate modifications associated with representation of the as-built condition. The revision block identification of the drawing modifications shall be left intact and the date of completion and the words "REVISED AS-BUILT" shall be placed in the revision block above the latest existing notation. Each drawing shall have the words "DRAWING OF WORK AS-BUILT" in letters 4.5 mm (3/16") high placed below the drawing title portion of the drawing title block; between the border and the trim line.
- d. The Contractor shall check all final as-built drawing files for accuracy, conformance to the initial drawing scheme and the above instructions. The Contracting Officer will review the drawings and drawing files for conformance to these standards.
- e. The Contractor shall furnish the digital as-built drawing files in the format native to the 2002 or latest version in common use of Autodesk, AUTOCADD. The Government will only accept the final product for full operation, without conversion or reformatting, in this format.
- f. Digital drawing files shall be furnished to the Contracting Officer on CD-ROM or other media and format as approved by the Contracting Officer. A transmittal sheet containing the name of the files, the date of creation, the CD-ROM number, and a short description of the contents, shall accompany the CD-ROM.
- g. A sample drawing shall be furnished to the Contracting Officer before delivery of final as-built drawings as a test to demonstrate compliance with the above instructions and file format compatibility with the described CADD software.
- h. One (1) complete set of the updated final Record Copy digital drawing files and one (1) paper plot or copy of the final Record drawings shall be delivered to the Contracting Officer within 30 calendar days of approval of the preliminary as-built drawings.

If upon review of the final as-built drawings, errors or omissions are found, the drawings and drawing files will be returned to the Contractor for corrections. The Contractor shall complete the corrections and return both the digital files and the as-built prints to the Contracting Officer within ten (10) calendar days.

1.26 NOT USED

1.27 CERTIFICATES OF COMPLIANCE

Any certificates required for demonstrating proof of compliance of materials with specification requirements shall be executed in accordance with Section 01335 SUBMITTAL PROCEDURES FOR DESIGN/BUILD PROJECT. Each certificate shall be signed by an official authorized to certify in behalf of the manufacturing company involved and shall contain the name and address of the Contractor, the project name and location, description and the quantity of the items involved, and date or dates of shipment or delivery to which the certificates apply. Copies of laboratory test reports submitted with certificates shall contain the name and address of the testing laboratory and the date or dates of the tests to which the report applies. Certification shall not be construed as relieving the Contractor from furnishing satisfactory material.

1.28 ACCIDENT PREVENTION

The Contractor shall comply with all applicable Host Country laws and with such additional measures as the Contracting Officer may find necessary in accordance with CONTRACT CLAUSE 52.236-13 entitled ACCIDENT PREVENTION (NOV 1991)-ALTERNATE 1 (APR 1984). Applicable provisions of the Corps of Engineers manual entitled Safety and Health Requirements Manual EM 385-1-1, will be applied to all work under this contract. The referenced manual may be obtained from the Contracting Officer's Representative at the jobsite or from the Qalaa House in Kabul, Afghanistan.

1.28.1 Accident Prevention Program

Within fifteen (15) days after receipt of Notice to Proceed, and at least ten (10) days prior to the accident prevention pre-work conference, four (4) copies of the Accident Prevention Plan required by the CONTRACT CLAUSE 52.236-13 entitled ACCIDENT PREVENTION (NOV 1991)- ALTERNATE I shall be submitted for review by the Contracting Officer. The Contractor shall not commence physical work at the site until the Accident Prevention Plan (APP) has been reviewed and accepted by the Contracting Officer or his authorized representative. The APP shall meet the requirements listed in Appendix "A" of EM385-1-1. The program shall include the following:

TAC Form 61 "Accident Prevention Program Hazard Analysis (Activity Hazard Analysis)" fully completed and signed by an executive officer of the company in block No. 13. The Activity Hazard Analysis is a method in which those hazards likely to cause a serious injury or fatality are analyzed for each phase of operations. Corrective action is planned in advance which will eliminate the hazards. An analysis is required for each new phase of work. On large or complex jobs the first phase may be presented in detail with the submittal of the Accident Prevention Plan rather than presenting the complete analysis. If the plan is to be presented in phases, a proposed outline for future phases must be submitted as a part of the initial Accident Prevention Plan submittal. Accident Prevention Plans will be reviewed for timeliness and adequacy at least monthly with a signature sheet signed and dated documenting that these reviews took place. Copy of company policy statement of Accident Prevention and any other guidance as required by EM 385-1-1, Appendix A.

1.28.2 Ground Fault Circuit Interrupter (GFCI) Requirement – Overseas Construction

The Corps of Engineers Health and Safety Manual, EM 385-1-1, section 11.C.05.a. states: "The GFCI device shall be calibrated to trip within the threshold values of 5 ma \pm 1 ma as specified in Underwriters Laboratory (UL) Standard 943." A variance from USACE has been granted allowing 10 ma, in lieu of 5 ma, for overseas activities that use 220 Volts(V)/50 hertz(Hz) electrical power.

1.28.3 Temporary Power - Electrical Distribution Boxes

EM 385-1-1 section 11.A.01.a. states "All electrical wiring and equipment shall be a type listed by a nationally recognized testing laboratory for the specific application for which it is to be used."

This includes temporary electrical distribution boxes. Locally manufactured electrical boxes will not be allowed. Only manufactured electrical distribution boxes that meet the European CE requirements, with 10 ma CE type GFCIs installed shall be allowed.

Contractors shall:

- a. Make no modifications that might void any CE or manufacturer certification.
- b. Test the installed systems to demonstrate that they operate properly and provide the 10 ma earth leakage protection.
- c. Ensure GFCIs will have an integral push-to-test function. The testing shall be performed on a regular basis.
- d. Check that proper grounding is checked regularly and flexible cords, connectors, and sockets inspected before each use.

1.29 HAZARDOUS MATERIALS

Should the Contractor encounter asbestos or other hazardous materials, during the construction period of this contract, he shall immediately stop all work activities in the area where the hazardous material is discovered. The Contractor shall then notify the Contracting Officer; identify the area of danger; and not proceed with work in that area until given approval from the Contracting Officer to continue work activities. Hazardous material is considered to be asbestos, explosive devices, toxic waste, or material hazardous to health and safety. The Contractor shall secure the area from daily traffic until it is safe to resume normal activities.

1.30 NOT USED

1.31 NOT USED

1.32 OPERATION AND MAINTENANCE (O&M) DATA FOR EQUIPMENT AND SYSTEMS

1.32.1 General

The requirements contained herein are in addition to all shop drawing submission requirements (e.g., SD-19) stated in other sections of the specification. The Contractor shall include provisions for obtaining the data required below in all purchase orders and sub-contract agreements issued under this contract. The Contractor shall obtain that data which is required to operate and maintain all items of equipment and all systems/subsystems under either normal or emergency operating conditions. See items listed under paragraph EQUIPMENT FOR WHICH O&M DATA MUST BE SUBMITTED for example.

1.32.2 O&M Data for Equipment

1.32.2.1 Equipment for Which O&M Data Must be Submitted

The Contractor shall provide all data necessary to operate and maintain all equipment purchased and/or installed under this contract. The data will consist of any O&M instructions not normally the common knowledge of a Journeyman Level Technician in the applicable trade. Provided below are examples of the general types of equipment for which the Contractor is required to submit O&M data. The examples provided are not definitive for this contract, but are provided to indicate the general types of equipment for which O&M data is required.

Control Devices Chillers Lighting Fixtures Motor Generator Sets Valves Cooling Towers Motors Kitchen Equipment Water Heaters Exhaust Fans Compressors Plumbing Fixtures Boilers Appliances (e.g. washing machines, food disposers, coffee urns, etc)

1.32.2.2 Data to be Provided for Each Equipment Item

For each equipment item O&M data shall be submitted as described below. For identical pieces of equipment installed within any one system, only one (1) file of O&M data for that equipment item will be required for maintenance purposes. Deviation from these requirements will require approval of the Contracting Officer. The data as a minimum will include for each equipment item, the following:

- a. Equipment O&M Data Sheet: Equipment O&M data sheet shall include the equipment name, manufacturer's name and address, model number, (including characteristics and any special remarks), and the serial number(s), tag number(s) or any user assigned identification number(s), and installed location(s) of the equipment. This sheet shall be the first page of each item of equipment O&M data package and shall contain a checklist covering paragraphs 1.32.2.2.b thru 1.32.2.2.j hereinafter.
- b. Equipment Description: Equipment description shall include item name, model number, serial number, equipment price (FOB Manufacturer), electrical and/or mechanical characteristics, manufacturer's name and address, order number and all other data found on the equipment name plates. Include local/regional representative of manufacturer, name, address, telephone number, and telex number.
- c. Component and Assembly Drawings/Master Parts List: Component and assembly drawings/master parts list shall contain exploded views and a master parts list clearly identifying all parts and subassemblies by manufacturer's part number. Master Parts list shall also include the price for each part (FOB Manufacturer) and effective date.
- d. Control Diagrams and Sequences of Operations: Control diagrams and sequences of operations shall include operating instructions (including normal start-up, normal shut-down and emergency shut-down as applicable).
- e. Performance Characteristics: Performance characteristics shall include performance curves for full range of operation, and data pertinent to characteristics of equipment provided.
- f. Installation Instructions: Installation instructions shall include adjustment and alignment procedures, checkout procedures and test procedures.
- g. Preventive Maintenance Procedures: Preventive maintenance procedures shall include inspection, cleaning, adjustment, service and lubrication instructions. A schedule shall be furnished for each piece of equipment listing manufacturer's recommended maintenance routine of specific tasks to be performed at specific intervals such as daily, weekly, monthly, quarterly, or based on the number of operating hours. Preventive maintenance schedules shall take into account operating conditions in Afghanistan.
- h. Corrective Maintenance Procedures: Corrective maintenance procedures shall include instructions for troubleshooting, repair, overhaul and calibration.
- i. Special Items: The Contractor shall prepare a list of special tools, test equipment, and safety precautions when specified in the Technical Provisions and special items that are normally provided by the manufacturer with the equipment. The list shall also include the current unit price and date for each item (FOB MANUFACTURER).
- j. Recommended Spare Parts List: List shall contain the manufacturer's recommendation for five (5) years, two (2) years, and one (1) year spare parts stock levels in Afghanistan. Current unit price and effective date, lead time, shelf life for each individual part, and total cost of all recommended parts shall be furnished.

1.32.2.3 Preparation of O&M Data for Each Piece of Equipment

At least two (2) sets of the final approved O&M Data shall be composed of original copies. No other form of printed and prepared data shall be acceptable unless approved in writing by the Contracting Officer. All data shall be prepared in the English language covering data described in paragraph EQUIPMENT FOR WHICH O&M DATA MUST BE SUBMITTED, and shall be furnished in the number of submittals (number of sets of volumes) specified in Section 01335 SUBMITTAL PROCEDURES FOR DESIGN/BUILD PROJECT of the Technical Provisions. Each item of equipment shall be cross-referenced in the equipment O&M Data and Systems Manuals, to include installation location using the Contractor's system of identification as approved by the Contracting Officer. All data shall be presented on 8-1/2 x 11 inch sheets to the greatest possible extent. Foldouts will normally be limited to 11 x 17 inch sheets. For other sets of data, reproductions shall be clear, legible, re-reproducible, and not subject to fade. Extraneous information on inapplicable models or components shall be removed or suitably marked through. O&M data shall be contained in a volume consisting of multi-ring binders of good commercial quality. Each volume shall be identified by the equipment name as shown on the Equipment O&M Data Sheet, and sequentially numbered. Each volume shall include an index of items included in the binder and the index shall be the first sheet in the binder, and all remaining data shall be taped accordingly. Volume binders shall be packed (maximum) 2/3 full to allow easy access to contents.

1.32.2.4 O&M Data Submittal Procedure for Each Equipment Item

The initial submittal of O&M Data for each item of equipment shall include all data required in paragraph DATA TO BE PROVIDED FOR EACH EQUIPMENT ITEM above, and as required by the technical specifications. Each O&M Data Package shall be submitted in two (2) copies to the Contracting Officer for approval of format and content, not later than ninety (90) calendar days following equipment item selection approval. After approval the two (2) copies will be returned to the Contractor to maintain for incorporation into the final submittal of the full set of O&M Manuals. The Contractor shall allow a minimum period of forty-five (45) calendar days from receipt by the government (exclusive of mailing time) for the Government review and approval/disapproval of O&M data.

1.32.2.5 Payment for Preparation and Submittal of O&M Data for Individual Equipment Items

For payment purposes, preparation and submittal of required O&M data shall be considered as part of the price for the individual item of equipment.

1.32.3 O&M Data for Systems

The Contractor shall develop and provide the data beyond separate equipment items necessary to operate and maintain all civil, mechanical and electrical systems for each building, each central plant, and/or each distribution or collection system. A system is defined as a group of equipment items related in purpose and which share electrical power or communication circuits as in a fire alarm system or which share mechanical piping or ductwork as in an HVAC system. O&M data for systems shall be submitted as described below.

1.32.3.1 Preparation and Organization of Systems O&M Manuals

At least two (2) sets of the final approved systems O&M manuals shall be composed of original copies. For each location and for each system installed, the Contractor shall prepare and provide the required number of sets of separate complete system O&M Manuals, bound in loose leaf three ring binders. These manuals will provide the basic information and direction needed by journeymen operators to effectively operate each system and by journeymen maintenance technicians to perform Preventive Maintenance (PM) and Corrective Maintenance (CM) routines on systems components. The following identification shall be printed on the cover and spine of each binder, the words "OPERATING AND MAINTENANCE INSTRUCTIONS", plus name of the system, the location of the building(s). When two or more binders are required for the data, for an individual system, the binder shall be marked 1 of n, 2 of n, 3 of n, etc.(where n equals the total number of binders). Each manual shall have a complete index page(s), which shall be inserted after the title page of the first volume of that system. Title page shall include name of project and project number. Each binder shall have a complete index that lists all the information and data contained in the binder(s).

All systems O&M Manuals shall include the following:

- a. Each piece of equipment will have a divider and tab properly identified.
- b. Each section for each piece of equipment will have a divider and tab properly identified.
- c. Narrative description of principles of operation.
- d. Systems flow diagrams showing point-to-point connections, sequence of operation, control diagrams and identification of each system component.
- e. Electrical single line diagrams in sufficient detail to define the system and operation of related parts.
- f. Final balancing reports for air, water and other systems as applicable. (These may be added to the manual after installation testing is completed and accepted.)
- g. Systems test reports and certification.
- h. Operating procedures including pre-start, start-up, normal operation, emergency operation, normal and emergency shut-down.
- i. Schedules including valve schedules, circuit breakers schedules, equipment schedules, etc.
- j. List of special tools and test and calibration equipment.
- k. List of systems components cross referenced to the O&M equipment data volume number.
- 1. System preventive maintenance procedures and schedules.
- m. System troubleshooting guides.
- n. System corrective maintenance procedures.
- o. Folded-up copy of the system's wall charts (Training instructions).

1.32.3.2 Submittal of Systems O&M Manuals

Submittal of Systems O&M Manuals for each system installed shall include all data required in paragraphs 1.32.2.2.a thru 1.32.2.2.j hereinbefore. Two (2) copies shall be submitted to the Contracting Officer for approval not later than 30 calendar days prior to the construction completion date. If disapproved the two (2) copies will be returned to the Contractor for correction and re-submittal. Final submittals of all Systems O&M Manuals must include and be simultaneous with all O&M Data Manuals for equipment associated with that system, and must be in Pashto, English and Dari. Upon completion of systems check out and acceptance tests the Contractor shall submit a supplemental submittal containing any addition, deletion or correction found appropriate due to these tests performed in the field or during training.

1.32.4 Framed Instructions for Systems

For each system, the Contractor shall provide framed instructions mounted on the wall of each mechanical and electrical equipment room, which contains a portion of the system. The size of the framed instructions will be governed by the content to be framed plus room for a minimum of two (2) inch border. The framed instructions shall include drawings and typed narrative descriptions as required to provide the following information:

1.32.4.1 Drawings

Drawings containing flow, piping, instrumentation and control diagrams of mechanical systems and wiring and control schematics of electrical systems contained within or controlled from that equipment room.

1.32.4.2 Equipment and System Narrative

Narrative containing equipment and system normal pre-start, start-up, operating and shut-down procedures.

1.32.4.3 Emergency Shut-Down Narrative

Narrative of emergency shut-down instructions and safety precautions.

1.32.4.4 Preparation and Installation of Framed Instructions

All material prepared for use as framed instructions to meet the requirements of paragraph EQUIPMENT AND SYSTEM NARRATIVE above shall be prepared in the English language. All material prepared for use as framed instructions to meet the requirement of paragraph EMERGENCY SHUT-DOWN NARRATIVE above shall be prepared in Pashto, Dari and English. Drawings and narratives prepared for use as framed instructions shall be submitted to the Contracting Officer for approval prior to posting. Framed instructions shall be mounted using frames with glass or rigid plastic covers as approved by the Contracting Officer. All framed instructions must be posted before final acceptance testing of the equipment and systems.

1.32.5 Contractor Responsibility for Updating O&M Information

The Contractor shall be responsible for the accuracy of all information furnished in accordance with the above requirements. The Contractor shall be responsible for updating or supplementing all O&M data, including data which has been previously submitted, to reflect changes in the contract or to correct errors discovered by any other means.

The O&M data for separate equipment items, the systems O&M Manuals, and the framed instructions prepared by the Contractor shall be utilized and verified during installation and testing of the equipment and/or systems and shall be updated and corrected as required. Errors found during systems testing and validation shall be corrected within fourteen (14) calendar days of completion of each test and validation.

Drawings, pages of text, etc. of systems O&M Manuals shall be complete in final form. Marked-up drawings or pages are not acceptable.

1.33 through 1.35 NOT USED

1.36 INSTRUCTIONS AND TRAINING FOR OPERATION AND MAINTENANCE

1.36.1 General

The Contractor shall be responsible for the instruction and training of operating and maintenance personnel as specified below and in the Technical Provisions of the specifications. Unless otherwise indicated in the Technical Provisions, operating and maintenance instructions shall be given for a minimum period as follows:

Title	Duration of Training
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Water System	_40 Hours_
Power System	40 Hours
Sewage System	40 Hours

1.36.2 Operation and Maintenance Training

The Contractor shall provide competent instructors for training of personnel designated by the Contracting Officer to operate mechanical and electrical building systems and equipment, perform the required preventive maintenance to minimize breakdown, and to perform necessary repairs when malfunction or breakdown of equipment occurs. Such training shall consist of classroom and on-the-equipment training for the periods specified, which shall be completed prior to acceptance of a system or equipment, as applicable. The instructor(s) shall have no other duties during the period of training. Classroom instruction shall not exceed fifty percent (50%) of the total training time, with the balance devoted to on-the-equipment demonstration and familiarization. Emphasis will be given to both electrical and mechanical features, in accordance with approved training plans. The contractor shall be prepared to offer training in Pashto, Dari and English.

1.36.3 Arrangements

The training shall be for not less than the periods of time specified, five (5) days per week, and eight (8) hours per day, subject to review and approval by the Contracting Officer. Each individual training session shall be presented one time only, shall be video taped in a television system compatible with the local area, and be scheduled in a manner acceptable to the Contracting Officer. At the completion of training, the video tapes shall become the property of the Government.

In addition to the Contractor's requirements to video tape each training section, the Government reserves the right to record, in any manner, the subject training material, or training sessions given by the Contractor, without additional cost to the Government. Recordings obtained will be used in future training by the Government. The operating and maintenance manual data, as specified to be furnished in these Special Clauses, shall be used as the base material for training.

1.36.4 Scheduling

The Contractor shall contact the Contracting Officer for the purpose of preliminary planning, scheduling, and coordination of training, to maximize effectiveness of the training program for available operating and maintenance personnel. The Contractor shall initiate and make arrangements for such contact within 30 calendar days after receipt of notification of award of contract; and shall include all significant times in scheduling and completing training in his PROJECT SCHEDULE.

The Contractor shall provide a draft training outline sufficient in detail to provide a broad indication and the type of scope of training to be given. It shall include but not be limited to; (a) a list of subjects to be presented; (b) estimated amounts of classroom and on the-equipment instruction for each subject; (c) a list of minimum qualifications for instructors; and (d) discussions concerning the types and amounts of visual aids, reference materials, tools and test equipment, mock-up and other training materials that will be employed during training.

1.36.5 Preliminary Plan

The Contractor shall submit seven (7) copies of an outline of his proposed training plan to the Contracting Officer for review and approval not later than 45 calendar days after Notice to Proceed. The plan will be reviewed and coordinated with the content of the O&M manuals.

1.36.6 Plan

The Contractor shall submit seven (7) copies of his proposed training plan to the Contracting Officer for approval not later than ninety (90) calendar days prior to start of any training. The plan shall include the following; (a) a weekly outline showing overall form and design of training presentation; (b) a day-by-day schedule showing time intervals, the major and subordinate subjects to be covered in each, the name of the instructor(s) and qualification summary of each, and identification of related handouts; (c) summary of the number of hours of classroom and on-the-equipment training; (d) a list of reference materials to be provided by the Contractor to the trainees; and (e) a list and description of the training materials to be used, such as text, visual aids, mock-up, tools, etc. The Contractor shall be responsible for furnishing all training materials to include, but not limited to, chairs and tables for classroom training. The Government shall identify the training location and provide the number of trainee personnel to the

Contractor within 30 days of receipt of the training plan. All costs for resubmission of training plans, training materials, etc., as requested by the Contracting Officer shall be borne by the Contractor. Re-submittals shall be made within twenty (20) days of notice from the Contracting Officer.

1.36.7 Attendance Roster/TAC Form 356

The Contractor shall develop an attendance roster or a similar document indicating each students attendance, prior to the start of each class, subject and/or topic. This includes both "Hands-On" and classroom training. It is strongly recommended that each student trained be required to sign this document at the beginning of each class day for each and every class, subject and/or topic taught on that day. The Contractor's failure to have student attendance verified in writing, may be cause for the Government to order the Contractor to repeat schooling where evidence of attendance can not be verified. No part of the time lost due to such repeat instruction shall be made the subject of claim for extension of time or for excess costs or damage by the Contractor. Within ten (10) working days after completion of Operation and Maintenance Training conducted in accordance with this clause and/or applicable Technical Provision section, the Contractor shall complete and submit TAC Form 356 "Operation and Maintenance Training Validation Certificate". The attendance roster shall be included as an attachment to TAC Form 356.

1.37 NOT USED

1.38 LOCALLY AVAILABLE SERVICE FOR EQUIPMENT

All equipment furnished under this contract, regardless of country of manufacture or purchase, must have in-country service availability. In the event that the Contractor proposed to provide equipment for which in-country service is not available, the Contractor must provide written justification for the Contracting Officer's approval. This justification shall be submitted for each product or material for which a waiver is sought concurrently with the submittal required by the Technical Provisions. Submission of group or "blanket" waivers is unacceptable.

1.39 NOT USED

1.40 CONTRACTOR FURNISHED EQUIPMENT LISTS

The Contractor shall furnish a list of all items, other than integral construction type items, furnished under the contract. Items such as furniture, drapes, rugs, vehicles, office machines, appliances, etc., shall fall under this category. The Contractor's list shall describe the item, give the unit price and total quantities of each. Model and serial numbers for equipment shall be provided when applicable. The Contractor shall keep an up-to-date register of all covered items and make this information available to the Contracting Officer or his representative at all times. Prior to acceptance, the Contractor shall submit the complete register to the Contracting Officer.

1.41 NOT USED

1.42 TIME EXTENSIONS FOR UNUSUALLY SEVERE WEATHER

1.42.1 General

This provision specifies the procedure for determination of time extensions for unusually severe weather in accordance with the Contract Clause 52.249-10 entitled DEFAULT (FIXED-PRICE CONSTRUCTION) APR 1984. The listing below defines the anticipated unusually severe weather for the contract period and is based on National Oceanic and Atmospheric Administration (NOAA) or similar data for the geographic location of the project. The schedule of anticipated unusually severe weather will constitute the baseline for determining weather time evaluations. Upon acknowledgment of the Notice to Proceed (NTP) and continuing throughout the contract period, actual unusually severe weather days will be recorded on a calendar day basis (including weekends and holidays) and compared to the anticipated unusually severe weather in the schedule below. The term "actual unusually severe weather days" shall include days actually impacted by unusually severe weather. The Contractor's schedule must reflect the anticipated unusually severe weather days on all weather dependent activities.

UNUSUALLY SEVERE WEATHER CALENDAR DAYS

January-9

February – 9

March – 14

April – 18

May - 15

June - 3

July - 5 August - 3

September – 3

October – 4

November – 5

December - 7

1.42.2 Time Extensions

The number of actual unusually severe weather days shall be calculated chronologically from the first to the last day in each month. Unusually severe weather days must prevent work for fifty percent (50%) or more of the Contractor's work day and delay work critical to the timely completion of the project. If the number of actual unusually severe weather days exceeds the number of days anticipated in the paragraph above, the Contracting Officer will determine whether the Contractor is entitled to a time extension. The Contracting Officer will convert any qualifying delays to calendar days and issue a modification in accordance with the Contract Clause 52.249-10 entitled DEFAULT (FIXED-PRICE CONSTRUCTION) APR 1984.

1.43 NOT USED

1.44 STANDARDIZATION

Where two or more items of the same type or class of equipment furnished in this project are required, the units shall be products of the same manufacturer and shall be interchangeable when of the same size, capacity, performance characteristics, and rating. The only exception to this requirement is where the items are interchangeable due to conformance with industry standards (valves, fittings, etc.), they need not be by the same manufacturer. This requirement applies to all manufactured items in the project, which normally require repair or replacement during the life of the equipment.

1.45 NOT USED

1.46 RESIDUAL CONSTRUCTION MATERIAL

All Contractor purchased materials and equipment intended for incorporation into the completed facilities and which are later determined excess to the actual construction requirements, will become the property of the Government. The residual materials and equipment shall be tagged (giving the area where like type material and equipment were installed), and stored in an orderly manner in a designated area as directed and approved by the Contracting Officer.

1.47 through 1.52 NOT USED

1.53 IDENTIFICATION OF EMPLOYEE'S PERSONNEL AND VEHICULAR ACCESS TO THE PROJECT SITES

The Police Security maintains the ultimate authority for establishing, monitoring, and enforcing security requirements for the Police Security Offices. All contractor, subcontractor, or vendor personnel and vehicles at any tier working at any location on the site are subject to a thorough search upon entering, departing, or at any time deemed necessary by the Police Security Personnel. The Contractor shall be responsible for compliance with all the Police security requirements.

The Government reserves the right to deny access or to require the contractor to remove any personnel or equipment deemed to be a threat to the security of the Police Security Office. The Contractor shall work through the Contracting Officer to ensure that the Police Security Regulations are followed.

1.53.1 Employee Identification

The Contractor shall be responsible for furnishing to each employee and for requiring each employee engaged on the work, to display identification as approved and directed by the Contracting Officer. Prescribed identification shall immediately be delivered to the Contracting Officer for cancellation upon release of any employee. When required, the Contractor shall obtain and provide fingerprints of persons employed on the project. Contractor and subcontractor personnel shall wear identifying markings on hard hats clearly identifying the company for whom the employee works.

1.53.2 Identification of Contractor Vehicles

The Contractor shall be responsible for requiring each vehicle engaged in the work to display permanent vehicular identification as approved and directed by the Contracting Officer. If acceptable to the Base Security Office and approved by the Contracting Officer, the Contractor may institute a system of non-permanent temporary identification for one-time delivery and transit vehicles. Each Contractor vehicle, machine, piece of equipment, or towed trailers, shall show the Contractor's name such that it is clearly visible on both front doors of the vehicle and both sides of a towed trailer. A valid license plate shall be displayed at all times. Contractor vehicles operated on Government property shall be maintained in a good state of repair, shall be insured, and shall be registered in accordance with Afghan Law.

1.53.3 Security Plan

The Contractor shall submit to the Contracting Officer, within fifteen (15) calendar days after Notice to Proceed, his proposed personnel and vehicular access plan. This plan shall cover all elements for issuance of the access passes, safeguarding of unissued passes, construction security operations, lost passes, temporary vehicle passes, and collection of passes for employee's and vehicles on 1)- temporary absence; 2)- termination or release; and 3)-termination or completion of contract. The plan shall address in detail the contractors proposed procedures, and organization necessary to produce and maintain effective security within the contract limits twenty-four (24) hours a day seven (7) days a week.

1.54 NOT USED

1.55 NOT USED

1.56 ON-SITE PHOTOGRAPHY PROHIBITION

The Contractor shall not engage in any form of photography without prior written approval from the Contracting Officer.

1.57 PUBLIC RELEASE OF INFORMATION

1.57.1 Prohibition

There shall be no public release of information or photographs concerning any aspect of the materials or services relating to this bid, contract, purchase order, or other documents resulting there from without the prior written approval of the Contracting Officer.

1.57.2 Subcontract and Purchase Orders

The Contractor agrees to insert the substance of this clause in all purchase orders and subcontract agreements issued under this contract.

1.58 through 1.65 NOT USED

1.66 ATTACHMENTS

TAC FORM 61 – Accident Prevention Program Hazard Analysis TAC FORM 356 – Operation and Maintenance Training Validation Certificate

-- End of Section --

SECTION 01312A

QUALITY CONTROL SYSTEM (QCS)

1.1 GENERAL

The Government will use the Resident Management System for Windows (RMS) to assist in its monitoring and administration of this contract. The Contractor shall use the Government-furnished Construction Contractor Module of RMS, referred to as QCS, to record, maintain, and submit various information throughout the contract period. The Contractor module, user manuals, updates, and training information can be downloaded from the RMS web site. This joint Government-Contractor use of RMS and QCS will facilitate electronic exchange of information and overall management of the contract. QCS provides the means for the Contractor to input, track, and electronically share information with the Government in the following areas:

Administration Finances Quality Control Submittal Monitoring Scheduling Import/Export of Data

1.1.1 Correspondence and Electronic Communications

For ease and speed of communications, both Government and Contractor will, to the maximum extent feasible, exchange correspondence and other documents in electronic format. Correspondence, pay requests and other documents comprising the official contract record shall also be provided in paper format, with signatures and dates where necessary. Paper documents will govern, in the event of discrepancy with the electronic version.

1.1.2 Other Factors

Particular attention is directed to Contract Clause, "Schedules for Construction Contracts", Contract Clause, "Payments", Section 01321, PROJECT SCHEDULE, Section 01335, SUBMITTAL PROCEDURES, and Section 01452, CONTRACTOR QUALITY CONTROL, which have a direct relationship to the reporting to be accomplished through QCS. Also, there is no separate payment for establishing and maintaining the QCS database; all costs associated therewith shall be included in the contract pricing for the work.

1.2 QCS SOFTWARE

QCS is a Windows-based program that can be run on a stand-alone personal computer or on a network. The Government will make available the QCS software to the Contractor after award of the construction contract. Prior to the Pre-Construction Conference, the Contractor shall be responsible to download, install and use the latest version of the QCS software from the Government's RMS Internet Website. Upon specific justification and request by the Contractor, the Government can provide QCS on 3-1/2 inch high-density diskettes or CD-ROM. Any program updates of QCS will be made available to the Contractor via the Government RMS Website as they become available.

1.3 SYSTEM REQUIREMENTS

The following is the minimum system configuration that the Contractor shall have to run QCS:

OCS and OAS System Hardware

IBM-compatible PC with 1000 MHz Pentium or higher processor 256+ MB RAM for workstation / 512+ MB RAM for server 1 GB hard drive disk space for sole use by the QCS system 3 1/2 inch high-density floppy drive Compact Disk (CD) Reader 8x speed or higher SVGA or higher resolution monitor (1024x768, 256 colors) Mouse or other pointing device Windows compatible printer. (Laser printer must have 4 MB+ of RAM) Connection to the Internet, minimum 56k BPS

Software

MS Windows 2000 or higher QAS-Word Processing software: MS Word 2000 or newer Latest version of: Netscape Navigator, Microsoft Internet

Explorer, or other browser that supports HTML 4.0 or higher Electronic mail (E-mail) MAPI compatible Virus protection software that is regularly upgraded with all

issued manufacturer's updates

1.4 RELATED INFORMATION

1.4.1 QCS User Guide

After contract award, the Contractor shall download instructions for the installation and use of QCS from the Government RMS Internet Website; the Contractor can obtain the current address from the Government. In case of justifiable difficulties, the Government will provide the Contractor with a CD-ROM containing these instructions.

1.4.2 Contractor Quality Control (CQC) Training

The use of QCS will be discussed with the Contractor's QC System Manager during the mandatory CQC Training class.

1.5 CONTRACT DATABASE Prior to the pre-construction conference, the Government shall provide the Contractor with basic contract award data to use for QCS. The Government will provide data updates to the Contractor as needed, generally by files attached to E-mail. These updates will generally consist of submittal reviews, correspondence status, QA comments, and other administrative and QA data.

1.6 DATABASE MAINTENANCE

The Contractor shall establish, maintain, and update data for the contract in the QCS database throughout the duration of the contract. The Contractor shall establish and maintain the QCS database at the Contractor's site office. Data updates to the Government shall be submitted by E-mail with file attachments, e.g., daily reports, schedule updates, payment requests. If permitted by the Contracting Officer, a data diskette or CD-ROM may be used instead of E-mail (see Paragraph DATASUBMISSION VIA COMPUTER DISKETTE OR CD-

ROM). The QCS database typically shall include current data on the following items:

1.6.1 Administration

1.6.1.1 Contractor Information

The database shall contain the Contractor's name, address, telephone numbers, management staff, and other required items. Within 14 calendar days of receipt of QCS software from the Government, the Contractor shall deliver Contractor administrative data in electronic format via E-mail.

1.6.1.2 Subcontractor Information

The database shall contain the name, trade, address, phone numbers, and other required information for all subcontractors. A subcontractor must be listed separately for each trade to be performed. Each subcontractor/trade shall be assigned a unique Responsibility Code, provided in QCS. Within 14 calendar days of receipt of QCS software from the Government, the Contractor shall deliver subcontractor administrative data in electronic format via E-mail.

1.6.1.3 Correspondence

All Contractor correspondence to the Government shall be identified with a serial number. Correspondence initiated by the Contractor's site office shall be prefixed with "S". Letters initiated by the Contractor's home (main) office shall be prefixed with "H". Letters shall be numbered starting from 0001. (e.g., H-0001 or S-0001). The Government's letters to the Contractor will be prefixed with "C".

1.6.1.4 Equipment

The Contractor's QCS database shall contain a current list of equipment planned for use or being used on the jobsite, including the most recent and planned equipment inspection dates.

1.6.1.5 Management Reporting

QCS includes a number of reports that Contractor management can use to track the status of the project. The value of these reports is reflective of the quality of the data input, and is maintained in the various sections of QCS. Among these reports are: Progress Payment Request worksheet, QA/QC comments, Submittal Register Status, Three-Phase Inspection checklists.

1.6.2 Finances

1.6.2.1 Pay Activity Data

The QCS database shall include a list of pay activities that the Contractor shall develop in conjunction with the construction schedule. The sum of all pay activities shall be equal to the total contract amount, including modifications. Pay activities shall be grouped by Contract Line Item Number (CLIN), and the sum of the activities shall equal the amount of each CLIN. The total of all CLINs equals the Contract Amount.

1.6.2.2 Payment Requests

All progress payment requests shall be prepared using QCS. The Contractor shall complete the payment request worksheet and include it with the payment request. The work completed under the contract, measured as percent or as specific quantities, shall be updated at least monthly. After the update, the Contractor shall generate a payment request report using QCS. The Contractor shall submit the payment requests with supporting data by E-mail with file attachment(s). If permitted by the Contracting Officer, a data diskette may be used instead of E-mail. Assigned paper copy of the approved payment request is also required, which shall govern in the event of discrepancy with the electronic version.

1.6.3 Quality Control (QC)

QCS provides a means to track implementation of the 3-phase QC Control System, prepare daily reports, identify and track deficiencies, document progress of work, and support other contractor QC requirements. The Contractor shall maintain this data on a daily basis. Entered data will automatically output to the QCS generated daily report. The Contractor shall provide the Government a Contractor Quality Control (CQC) Plan within the time required in Section 01452, CONTRACTOR QUALITY CONTROL. Within seven calendar days of Government acceptance, the Contractor shall submit a data diskette or CD-ROM reflecting the information contained in the accepted CQC Plan: schedule, pay activities, features of work, submittal register, QC requirements, and equipment list.

1.6.3.1 Daily Contractor Quality Control (CQC) Reports.

QCS includes the means to produce the Daily CQC Report. The Contractor may use other formats to record basic QC data. However, the Daily CQC Report generated by QCS shall be the Contractor's official report. Data from any supplemental reports by the Contractor shall be summarized and consolidated onto the QCS-generated Daily CQC Report. Daily CQC Reports shall be submitted as required by Section 01452, CONTRACTOR QUALITY CONTROL. Reports shall be submitted electronically to the Government using E-mail or diskette within 24 hours after the date covered by the report. Use of either mode of submittal shall be coordinated with the Government representative. The Contractor shall also provide the Government a signed, printed copy of the daily CQC report.

1.6.3.2 Deficiency Tracking.

The Contractor shall use QCS to track deficiencies. Deficiencies identified by the Contractor will be numerically tracked using QC punch list items. The Contractor shall maintain a current log of its QC punch list items in the QCS database. The Government will log the deficiencies it has identified using its QA punch list items. The Government's QA punch list items will be included in its export file to the Contractor. The Contractor shall regularly update the correction status of both QC and QA punch list items.

1.6.3.3 Three-Phase Control Meetings

The Contractor shall maintain scheduled and actual dates and times of preparatory and initial control meetings in OCS.

1.6.3.4 Accident/Safety Tracking.

The Government will issue safety comments, directions, or guidance whenever safety deficiencies are observed. The Government's safety comments will be included in its export file to the Contractor. The Contractor shall regularly update the correction status of the safety comments. In addition, the Contractor shall utilize QCS to advise the Government of any accidents occurring on the jobsite. This brief supplemental entry is not to be considered as a substitute for completion of mandatory reports, e.g., ENG Form 3394 and OSHA Form 300.

1.6.3.5 Features of Work

The Contractor shall include a complete list of the features of work in the QCS database. A feature of work may be associated with multiple pay activities. However, each pay activity (see subparagraph "Pay Activity Data" of paragraph "Finances") will only be linked to a single feature of work.

1.6.3.6 QC Requirements

The Contractor shall develop and maintain a complete list of QC testing, transferred and installed property, and user training requirements in QCS. The Contractor shall update all data on these QC requirements as work progresses, and shall promptly provide this information to the Government via QCS.

1.6.4 Submittal Management

The Government will provide the initial submittal register in electronic format. Thereafter, the Contractor shall maintain a complete list of all submittals, including completion of all data columns. Dates on which submittals are received and returned by the Government will be included in its export file to the Contractor. The Contractor shall use QCS to track and transmit all submittals. ENG Form 4025, submittal transmittal form, and the submittal register update shall be produced using QCS. RMS will be used to update, store and exchange submittal registers and transmittals, but will not be used for storage of actual submittals.

1.6.5 Schedule

The Contractor shall develop a construction schedule consisting of pay activities, in accordance with Contract Clause "Schedules for Construction Contracts", or Section 01321, PROJECT SCHEDULE, as applicable. This schedule shall be input and maintained in the QCS database either manually or by using the Standard Data Exchange Format (SDEF) (see Section 01321 PROJECT SCHEDULE). The updated schedule data shall be included with each pay request submitted by the Contractor.

1.6.6 Import/Export of Data

QCS includes the ability to export Contractor data to the Government and to import submittal register and other Government-provided data, and schedule data using SDEF.

1.7 IMPLEMENTATION

Contractor use of QCS as described in the preceding paragraphs is mandatory. The Contractor shall ensure that sufficient resources are available to maintain its QCS database, and to provide the Government with regular database updates. QCS shall be an integral part of the Contractor's management of quality control.

1.8 DATA SUBMISSION VIA COMPUTER DISKETTE OR CD-ROM

The Government-preferred method for Contractor's submission of updates, payment requests, correspondence and other data is by E-mail with file attachment(s). For locations where this is not feasible, the Contracting Officer may permit use of computer diskettes or CD-ROM for data transfer. Data on the disks or CDs shall be exported using the QCS built-in export function. If used, diskettes and CD-ROMs will be submitted in accordance with the following:

1.8.1 File Medium

The Contractor shall submit required data on 3-1/2 inch double-sided high-density diskettes formatted to hold 1.44 MB of data, capable of running under Microsoft Windows 95 or newer. Alternatively, CD-ROMs may be used. They shall conform to industry standards used in the United States. All data shall be provided in English.

1.8.2 Disk or CD-ROM Labels

The Contractor shall affix a permanent exterior label to each diskette and CD-ROM submitted. The label shall indicate in English, the QCS file name, full contract number, contract name, project location, data date, name and telephone number of person responsible for the data.

1.8.3 File Names

The Government will provide the file names to be used by the Contractor with the QCS software.

1.9 MONTHLY COORDINATION MEETING

The Contractor shall update the QCS database each workday. At least monthly, the Contractor shall generate and submit an export file to the Government with schedule update and progress payment request. As required in Contract Clause "Payments", at least one week prior to submittal, the Contractor shall meet with the Government representative to review the planned progress payment data submission for errors and omissions. The Contractor shall make all required corrections prior to Government acceptance of the export file and progress payment request. Payment requests accompanied by incomplete or incorrect data submittals will be returned. The Government will not process progress payments until an acceptable QCS export file is received.

1.10 NOTIFICATION OF NONCOMPLIANCE

The Contracting Officer will notify the Contractor of any detected noncompliance with the requirements of this specification. The Contractor shall take immediate corrective action after receipt of such notice. Such notice, when delivered to the Contractor at the work site, shall be deemed sufficient for the purpose of notification.

-- End of Section -

SECTION 01321

PROJECT SCHEDULE

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of the specification to the extent referenced. The publications are referenced in the text by basic designation only.

U.S. ARMY CORPS OF ENGINEERS (USACE) ER 1-1-11 (1995) Progress, Schedules, and Network Analysis Systems

1.2 QUALIFICATIONS

The Contractor shall designate an authorized representative who shall be responsible for the preparation of all required project schedule reports.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.1 GENERAL REQUIREMENTS

Pursuant to the Contract Clause, SCHEDULE FOR CONSTRUCTION CONTRACTS, a

Project Schedule as described below shall be prepared. The scheduling of Construction design and construction shall be the responsibility of the Contractor. Contractor management personnel shall actively participate in its development. Designers, Subcontractors and suppliers working on the project shall also contribute in developing and maintaining an accurate Project Schedule. The approved Project Schedule shall be used to measure the progress of the work, to aid in evaluating time extensions, and to provide the basis of all progress payments.

3.2 BASIS FOR PAYMENT

The schedule shall be the basis for measuring Contractor progress. Lack of an approved schedule or scheduling personnel will result in an inability of the Contracting Officer to evaluate Contractor's progress for the purposes of payment. Failure of the Contractor to provide all information, as specified below, shall result in the disapproval of the entire Project Schedule submission and the inability of the Contracting Officer to evaluate Contractor progress for payment purposes. In the case where Project Schedule revisions have been directed by the Contracting Officer and those revisions have not been included in the Project Schedule, the Contracting Officer may hold retainage up to the maximum allowed by contract, each payment period, until revisions to the Project Schedule have been made.

3.3 PROJECT SCHEDULE

The computer software system utilized by the Contractor to produce the Project Schedule shall be capable of providing all requirements of this specification. Failure of the Contractor to meet the requirements of this specification shall result in the disapproval of the schedule. Manual methods used to produce any required information shall require approval by the Contracting Officer.

3.3.1 Use of the Critical Path Method

The Critical Path Method (CPM) of network calculation shall be used to generate the Project Schedule. The Contractor shall provide the Project Schedule in the Precedence Diagram Method (PDM).

3.3.2 Level of Detail Required

The Project Schedule shall include an appropriate level of detail. Failure to develop or update the Project Schedule or provide data to the Contracting Officer at the appropriate level of detail, as specified by the Contracting Officer, shall result in the disapproval of the schedule. The Contracting Officer will use, but is not limited to, the following conditions to determine the appropriate level of detail to be used in the Project Schedule:

3.3.2.1 Activity Durations

Contractor submissions shall follow the direction of the Contracting Officer regarding reasonable activity durations. Reasonable durations are those that allow the progress of activities to be accurately determined between payment periods (usually less than 2 percent of all non-procurement activities' Original Durations are greater than 20 days).

3.3.2.2 Design and Permit Activities

Design and permitting activities, including necessary conferences and follow up actions and design package submission dates, shall be integrated into the schedule.

3.3.2.3 Procurement Activities

Tasks related to the procurement of long lead materials or equipment shall be included as separate activities in the project schedule. Long lead materials and equipment are those materials that have a procurement cycle of over 90 days. Examples of procurement process activities include, but are not limited to: submittals, approvals, procurement, fabrication, and delivery.

3.3.2.4 Critical Activities

The following activities shall be listed as separate line activities on the Contractor's project schedule:

- a. Submission and approval of mechanical/electrical layout drawings.
- b. Submission and approval of O & M manuals.
- c. Submission and approval of as-built drawings.
- d. Submission and approval of 1354 data and installed equipment lists.
- e. Submission and approval of testing and air balance (TAB).
- f. Submission of TAB specialist design review report.
- g. Submission and approval of fire protection specialist.
- h. Submission and approval of testing and balancing of HVAC plus commissioning plans and data.
- i. Air and water balance dates.
- j. HVAC commissioning dates.
- k. Controls testing plan.
- 1. Controls testing.
- m. Performance Verification testing.
- n. Other systems testing, if required.
- o. Pre-final inspection.
- p. Correction of punch list from pre-final inspection.
- q. Final inspection.

3.3.2.5 Government Activities

Government and other agency activities that could impact progress shall be shown. These activities include, but are not limited to: design reviews, environmental permit approvals by State regulators, inspections, utility tie in, and Government Furnished Equipment (GFE).

3.3.2.6 Responsibility- All activities shall be identified in the project schedule by the party responsible to perform the work. Responsibility includes, but is not limited to, the subcontracting firm, contractor work force, or government agency performing a given task. Activities shall not belong to more than one responsible party. The responsible party for each activity shall be identified by the Responsibility Code.

3.3.2.7 Work Areas

All activities shall be identified in the project schedule by the work area in which the activity occurs. Activities shall not be allowed to cover more than one work area. The work area of each activity shall be identified by the Work Area Code.

3.3.2.8 Modification or Claim Number

Any activity that is added or changed by contract modification or used to justify claimed time shall be identified by a mod or claim code that changed the activity. Activities shall not belong to more than one modification or claim item. The modification or claim number of each activity shall be identified by the Mod or Claim Number. Whenever possible, changes shall be added to the schedule by adding new activities. Existing activities shall not normally be changed to reflect modifications.

3.3.2.9 Work Item

All activities shall be identified in the project schedule by the Work Item to which the activity belongs. An activity shall not contain work in more than one work item. The work item for each appropriate activity shall be identified by the Work Item Code.

3.3.2.10 Phase of Work

All activities shall be identified in the project schedule by the phases of work in which the activity occurs. Activities shall not contain work in more than one phase of work. The project phase of each activity shall be by the unique Phase of Work Code.

3.3.2.11 Category of Work

All Activities shall be identified in the project schedule according to the category of work which best describes the activity. Category of work refers, but is not limited, to the procurement chain of activities including such items as designs, design package submissions design reviews, review conferences, permits, submittals, approvals, procurement, fabrication, delivery, installation, start-up, and testing. The category of work for each activity shall be identified by the Category of Work Code.

3.3.2.12 Feature of Work

All activities shall be identified in the project schedule according to the feature of work to which the activity belongs. Feature of work refers, but is not limited to, a work breakdown structure for the project. The feature of work for each activity shall be identified by the Feature of Work Code.

3.3.3 Scheduled Project Completion

The schedule interval shall extend from award of contract to the contract completion date.

3.3.3.1 Project Start Date

The schedule shall start no earlier than the date on which award of contract was acknowledged. The Contractor shall include as the first activity in the project schedule an activity called "Start Project". The "Start Project" activity shall have an "ES" constraint date equal to the date that the award of task order was acknowledged, and a zero day duration.

3.3.3.2 Constraint of Last Activity

Completion of the last activity in the schedule shall be constrained by the contract completion date. Calculation on project updates shall be such that if the early finish of the last activity falls after the contract completion date, then the float calculation shall reflect a negative float on the critical path. The Contractor shall include as the last activity

in the project schedule an activity called "End Project". The "End Project" activity shall have an "LF" constraint date equal to the completion date for the project, and a zero day duration.

3.3.3.3 Early Project Completion

In the event the project schedule shows completion of the project prior to the contract completion date, the Contractor shall identify those activities that have been accelerated and/or those activities that are scheduled in parallel to support the Contractor's "early" completion. Contractor shall specifically address each of the activities noted in the narrative report at every project schedule update period to assist the Contracting Officer in evaluating the Contractor's ability to actually complete prior to the contract period.

3.3.4 Interim Completion Dates

Contractually specified interim completion dates shall also be constrained to show negative float if the early finish date of the last activity in that phase falls after the interim completion date.

3.3.4.1 Start Phase

The Contractor shall include as the first activity for a project phase an activity called "Start Phase X" where "X" refers to the phase of work. The "Start Phase X" activity shall have an "ES" constraint date equal to the date on which the award of task order was acknowledged, and a zero day duration.

3.3.4.2 End Phase

The Contractor shall include as the last activity in a project phase an activity called "End Phase X" where "X" refers to the phase of work. The "End Phase X" activity shall have an "LF" constraint date equal to the completion date for the project, and a zero day duration.

3.3.4.3 Phase X

The Contractor shall include a hammock type activity for each project phase called "Phase X" where "X" refers to the phase of work. The "Phase X" activity shall be logically tied to the earliest and latest activities in the phase.

3.3.5 Default Progress Data Disallowed

Actual Start and Finish dates shall not be automatically updated by default mechanisms that may be included in CPM scheduling software systems. Actual Start and Finish dates on the CPM schedule shall match those dates provided from Contractor Quality Control Reports. Failure of the Contractor to document the Actual Start and Finish dates on the Daily Quality Control report for every in-progress or completed activity, and failure to ensure that the data contained on the Daily Quality Control reports is the sole basis for schedule updating shall result in the disapproval of the Contractor's schedule and the inability of the Contracting Officer to evaluate Contractor progress for payment purposes. Updating of the percent complete and the remaining duration of any activity shall be independent functions. Program features which calculate one of these parameters from the other shall be disabled.

3.3.6 Out-of-Sequence Progress

Activities that have posted progress without all preceding logic being satisfied (Out-of-Sequence Progress) will be allowed only on a case-by-case approval of the Contracting Officer. The Contractor shall propose logic corrections to eliminate all out of sequence progress or justify not changing the sequencing for approval prior to submitting an updated project schedule.

3.3.7 Negative Lags

Lag durations contained in the project schedule shall not have a negative value.

3.4 PROJECT SCHEDULE SUBMISSIONS

The Contractor shall provide the submissions as described below. The data disk, reports, and network diagrams required for each submission are contained in paragraph SUBMISSION REQUIREMENTS.

3.4.1 Preliminary Project Schedule Submission

The Preliminary Project Schedule, defining the Contractor's planned operations for the first 60 calendar days shall be submitted for approval within 20 calendar days after award of task order is acknowledged. The approved preliminary schedule shall be used for payment purposes not to exceed 60 calendar days after award of contract.

3.4.2 Initial Project Schedule Submission

The Initial Project Schedule shall be submitted for approval within 40 calendar days after award of contract. The schedule shall provide a reasonable sequence of activities which represent work through the entire project and shall be at a reasonable level of detail.

3.4.3 Periodic Schedule Updates

Based on the result of progress meetings, specified in "Periodic Progress Meetings," the Contractor shall submit periodic schedule updates. These submissions shall enable the Contracting Officer to assess Contractor's progress. If the Contractor fails or refuses to furnish the information and project schedule data, which in the judgment of the Contracting Officer or authorized representative is necessary for verifying the Contractor's progress, the Contractor shall be deemed not to have provided an estimate upon which progress payment may be made.

3.4.4 Standard Activity Coding Dictionary

The Contractor shall use the activity coding structure defined in the Standard Data Exchange Format (SDEF) in ER 1-1-11, Appendix A. This exact structure is mandatory, even if some fields are not used.

3.5 SUBMISSION REQUIREMENTS

The following items shall be submitted by the Contractor for the preliminary submission, initial submission, and every periodic project schedule update throughout the life of the project:

3.5.1 Data Disks

Two [2] Data Compact Disks containing the project schedule shall be provided. Data on the disks shall adhere to the SDEF format specified in ER 1-1-11, Appendix A.

3.5.1.1 File Medium

Required data shall be submitted on Compact Disk, formatted to hold 700 MB of data, under the MS-DOS Version 5. or 6.x, unless otherwise approved by the Contracting Officer.

3.5.1.2 Disk Label

A permanent exterior label shall be affixed to each disk submitted. The label shall indicate the type of schedule (Preliminary, Initial, Update, or Change), full contract number, project name, project location, data date, name and telephone number of person responsible for the schedule, and the MSDOS version used to format the disk.

3.5.1.3 File Name

Each file submitted shall have a name related to either the schedule data date, project name, or contract number. The Contractor shall develop a naming convention that will ensure that the names of the files submitted are unique. The Contractor shall submit the file naming convention to the Contracting Officer for approval.

3.5.2 Narrative Report

A Narrative Report shall be provided with the preliminary, initial, and each update of the project schedule. This report shall be provided as the basis of the Contractor's progress payment request. The Narrative Report shall include: a description of activities along the 2 most critical paths, a description of current and anticipated problem areas or delaying factors and their impact, and an explanation of corrective actions taken or required to be taken. The narrative report is expected to relay to the Government, the Contractor's thorough analysis of the schedule output and its plans to compensate for any problems, either current or potential, which are revealed through that analysis.

3.5.3 Approved Changes Verification

Only project schedule changes that have been previously approved by the Contracting Officer shall be included in the schedule submission. The Narrative Report shall specifically reference, on an activity by activity basis, all changes made since the previous period and relate each change to documented, approved schedule changes.

3.5.4 Schedule Reports

The format for each activity for the schedule reports listed below shall contain: Activity Numbers, Activity Description, Original Duration, Remaining Duration, Early Start Date, Early Finish Date, Late Start Date, Late Finish Date, Total Float. Actual Start and Actual Finish Dates shall be printed for those activities in progress or completed.

3.5.4.1 Activity Report

A list of all activities sorted according to activity number.

3.5.4.2 Logic Report

A list of Preceding and Succeeding activities for every activity in ascending order by activity number. Preceding and succeeding activities shall include all information listed above in paragraph Schedule Reports. A blank line shall be left between each activity grouping.

3.5.4.3 Total Float Report

A list of all incomplete activities sorted in ascending order of total float. Activities which have the same amount of total float shall be listed in ascending order of Early Start Dates. Completed activities shall not be shown on this report.

3.5.4.4 Earnings Report

A compilation of the Contractor's Total Earnings on the project from award of contract until the most recent Monthly Progress Meeting. This report shall reflect the Earnings of specific activities based on the agreements made in the field and approved between the Contractor and Contracting Officer at the most recent Monthly Progress Meeting. Provided that the Contractor has provided a complete schedule update, this report shall serve as the basis of determining Contractor Payment. Activities shall be grouped by work item and sorted by activity numbers. This report shall: sum all activities in a work item and provide a work item percent; and complete and sum all work items to

provide a total project percent complete. The printed report shall contain, for each activity: the Activity Number, Activity Description, Original Budgeted Amount, Total Quantity, Quantity to Date, Percent Complete (based on cost), and Earnings to Date.

3.5.5 Network Diagram

The network diagram shall be required on the initial schedule submission and on monthly schedule update submissions. The network diagram shall depict and display the order and interdependence of activities and the

sequence in which the work is to be accomplished. The Contracting Officer will use, but is not limited to, the following conditions to review compliance with this paragraph:

3.5.5.1 Continuous Flow

Diagrams shall show a continuous flow from left to right with no arrows from right to left. The activity number, description, duration, and estimated earned value shall be shown on the diagram.

3.5.5.2 Project Milestone Dates

Dates shall be shown on the diagram for start of project, any contract required interim completion dates, and contract completion dates.

3.5.5.3 Critical Path

The critical path shall be clearly shown.

3.5.5.4 Banding

Activities shall be grouped to assist in the understanding of the activity sequence. Typically, this flow will group activities by category of work, work area and/or responsibility.

3.5.5.5 S-Curves

Earnings curves showing projected early and late earnings and earnings to date.

3.6 PERIODIC PROGRESS MEETINGS

Progress meetings to discuss payment shall include a monthly onsite meeting or other regular intervals mutually agreed to at the preconstruction conference. During this meeting the Contractor shall describe, on an activity by activity basis, all proposed revisions and adjustments to the project schedule required to reflect the current status of the project. The Contracting Officer will approve activity progress, proposed revisions, and adjustments as appropriate.

3.6.1 Meeting Attendance

The Contractor's Project Manager and Scheduler shall attend the regular progress meeting.

3.6.2 Update Submission Following Progress Meeting

A complete update of the project schedule containing all approved progress, revisions, and adjustments, based on the regular progress meeting, shall be submitted not later than 4 working days after the monthly progress meeting.

3.6.3 Progress Meeting Contents

Update information, including Actual Start Dates, Actual Finish Dates, Remaining Durations, and Cost-to-Date shall be subject to the approval of the Contracting Officer. As a minimum, the Contractor shall address the following items on an activity by activity basis during each progress meeting.

3.6.3.1 Start and Finish Dates

The Actual Start and Actual Finish dates for each activity currently in progress or completed.

3.6.3.2 Time Completion

The estimated Remaining Duration for each activity in-progress. Time-based progress calculations shall be based on Remaining Duration for each activity.

3.6.3.3 Cost Completion

The earnings for each activity started. Payment will be based on earnings for each in-progress or completed activity. Payment for individual activities will not be made for work that contains quality defects. A portion of the overall project amount may be retained based on delays of activities.

3.6.3.4 Logic Changes

All logic changes pertaining to change orders, change orders to be incorporated into the schedule, contractor proposed changes in work sequence, corrections to schedule logic for out-of-sequence progress, lag durations, and other changes that have been made pursuant to contract provisions shall be specifically identified and discussed.

3.6.3.5 Other Changes

Other changes required due to delays in completion of any activity or group of activities include: 1) delays beyond the Contractor's control, such as strikes and unusual weather. 2) delays encountered due to submittals, Government Activities, deliveries or work stoppages which make re-planning the work necessary. 3) Changes required to correct a schedule which does not represent the actual or planned prosecution and progress of the work.

3.7 REQUESTS FOR TIME EXTENSIONS

In the event the Contractor requests an extension of the contract completion date, or any interim milestone date, the Contractor shall furnish the following for a determination as to whether or not the Contractor is entitled to an extension of time under the provisions of the contract: justification, project schedule data, and supporting evidence as the Contracting Officer may deem necessary. Submission of proof of delay, based on revised activity logic, duration, and costs (updated to the specific date that the delay occurred) is obligatory to any approvals.

3.7.1 Justification of Delay

The project schedule shall clearly display that the Contractor has used, in full, all the float time available for the work involved with this request. The Contracting Officer's determination as to the number of allowable days of contract extension shall be based upon the project schedule updates in effect for the time period in question, and other factual information. Actual delays that are found to be caused by the Contractor's own actions, which result in the extension of the schedule, will not be a cause for a time extension to the contract completion date.

3.7.2 Submission Requirements

The Contractor shall submit a justification for each request for a change in the contract completion date of under 2 weeks based upon the most recent schedule update at the time of the constructive direction issued for the change. Such a request shall be in accordance with the requirements of other appropriate Contract Clauses and shall include, as a minimum:

- a. A list of affected activities, with their associated project schedule activity number.
- b. A brief explanation of the causes of the change.
- c. An analysis of the overall impact of the changes proposed.
- d. A sub-network of the affected area.

Activities impacted in each justification for change shall be identified by a unique activity code contained in the required data file.

3.7.3 Additional Submission Requirements

For any requested time extension of over 2 weeks, the Contracting Officer may request an interim update with revised activities for a specific change request. The Contractor shall provide this disk within 4 days of the Contracting Officer's request.

3.8 DIRECTED CHANGES

If changes are issued prior to settlement of price and/or time, the Contractor shall submit proposed schedule revisions to the Contracting Officer within 2 weeks of this task order being issued. The proposed revisions to the schedule will be approved by the Contracting Officer prior to inclusion of those changes within the project schedule. If the Contractor fails to submit the proposed revisions, the Contracting Officer may furnish the Contractor with suggested revisions to the project schedule. The Contractor shall include these revisions in the project schedule until revisions are submitted, and final changes and impacts have been negotiated. If the Contractor has any objections to the revisions furnished by the Contracting Officer, the Contractor shall advise the Contracting Officer within 2 weeks of receipt of the revisions. Regardless of the objections, the Contractor shall continue to update the schedule with the Contracting Officer's revisions until a mutual agreement in the revisions is reached. If the Contractor fails to submit alternative revisions within 2 weeks of receipt of the Contracting Officer's proposed revisions, the Contractor will be deemed to have concurred with the Contracting Officer's proposed revisions. The proposed revisions will then be the basis for an equitable adjustment for performance of the work.

3.9 OWNERSHIP OF FLOAT

Float available in the schedule, at any time, shall not be considered for the exclusive use of either the Government or the Contractor.

-- End of Section --

SECTION 01335

SUBMITTAL PROCEDURES FOR DESIGN-BUILD PROJECT

PART 1 GENERAL

1.1 REFERENCE

The publication listed below forms a part of this specification to the extent referenced. The publication is referenced in the text by basic designation only.

CONSTRUCTION SPECIFICATIONS INSTITUTE

Manual of Practice Construction Specifications Institute 601 Madison Street Alexandria, Virginia 22314-1791

1.2 SUBMITTAL CLASSIFICATION

Submittals are classified as follows:

1.2.1 DESIGN SUBMITTALS

Contractor Furnished design submittals are the various design documents which primarily consist of specifications, drawings and design analysis and calculations. The Design-Build Contractor may submit materials approve for use in other projects in the Afghanistan Engineer District AED for instant approval. Items with long lead time shall not be specified due to short construction time. Clearance for construction shall not be construed as meaning Government approval. Unless otherwise indicated, the risk for the design is the sole responsibility of the Design-Build Contractor.

1.3 CONSTRUCTION SUBMITTALS

1.3.1 Contractor Furnished Government Approved Construction Submittals

Government approved construction submittals are primarily related to plans (Contractor Quality Control, Accident Prevention, Resident Management System, Area Use etc) schedules Project Schedule, and certificates of compliance.

1.3.2 For Information Only Construction Submittals (FIO)

1.4 SUBMITTAL CERTIFICATION

All submittals not requiring Designer of Record or Government approval will be for information only.

The CQC organization shall be responsible for certifying that all submittals and deliverables have been reviewed in detail for completeness are correct, and are in strict conformance with the contract and or approved design drawings, specifications, and reference documents.

1.4.1 Effective Quality Control System

The Design-Build Contractor is responsible for quality control and shall establish and maintain an effective quality control system in compliance with Contract.

1.4.1.1 Organizational Responsibility

The quality control system shall cover all design, construction, subcontractor, manufacturer, vendor, and supplier operations at any tier, both onsite and offsite.

1.4.1.2 CQC System Manager Review and Approval

Prior to submittal, all items shall be checked and approved by the Design-Build Contractor's Quality Control (CQC) System Manager. If found to be in strict conformance with the contract and approved design requirements, each item shall be stamped, signed, and dated by the CQC System Manager. Copies of the CQC organizations review comments indicating action taken shall be included within each submittal.

1.4.1.3 Determination of Compliance

Each submittal shall be complete and in sufficient detail to allow ready determination of compliance with contract and approved design requirements by the Contracting Officer.

1.4.2 Responsibility for Errors or Omissions

It is the sole responsibility of the Design-Build Contractor to ensure that submittals do or do not comply with the contract and approved design documents. Government review, clearance for construction, or approval by the Contracting Officer shall not relieve the Design-Build Contractor from responsibility for any errors or omissions in such drawings, nor from responsibility for complying with the requirements of this contract and approved design documents.

1.4.2.1 Government Review

Government review and clearance for construction shall not be construed as a complete check, but will indicate only that the general method of construction, materials, detailing and other information are satisfactory.

1.4.2.2 Substitutions

After design submittals have been reviewed and cleared for construction by the Contracting Officer, no resubmittal for the purpose of substituting materials or equipment will be considered unless justified as indicated in the paragraph entitled VARIATIONS.

1.4.3 Untimely and Unacceptable Submittals

If the Design-Build Contractor fails to submit submittals in a timely fashion, or repetitively submits submittals that are not in strict conformance with the contract and approved design documents, no part of the time lost due to actions shall be made the subject of claim for extension of time or for excess costs or damages by the Design-Build Contractor.

1.4.4 STAMPS

Stamps shall be used by the Design-Build Contractor on all design and post design construction submittals to certify that the submittal meets contract requirements and shall be similar to the following:

Design-Build Contractor (Firm Name) Contract Number Contract Name

I certify that this submittal accurate, is in strict conformance with all contract requirements, has been thoroughly coordinated and cross checked against all other applicable disciplines to prevent the

omission of vital information, that all conflicts have been resolved, and that repetition has been avoided. It is complete and in sufficient detail to allow ready determination of compliance with contract requirements by the Contracting Officer.

Name of CQC System Manager:	
Signature of CQC System Manager:	
Date:	

1.5 ENGLISH LANGUAGE

All specifications, drawings, design analysis, design calculations, shop drawings, catalog data, materials lists, and equipment schedules submitted shall be in the English language.

1.6 Design Calculations

Calculations shall be in metric units to meet the requirements of the design. Quantities on the contract and or approved design drawings stated in metric units, shall also be stated in metric units in the design analysis to match the drawings.

1.7 WITHHOLDING OF PAYMENT FOR SUBMITTALS

1.7.1 Design Submittals

Payment for Design work will not be made in whole or in part until the Government has reviewed and cleared the design for construction.

1.7.2 Construction Submittals

Payment for materials incorporated in the work will not be made if required approvals have not been obtained. The Design-Build Contractor is allowed partial or total invoice payment for materials shipped from the Continental United States (CONUS), and/or stored at the site, the Design-Build Contractor shall with his request for such payment, submit copies of approvals (ENG Form 4025) certifying that the materials that are being shipped and/or stored have been approved and are in full compliance with the contract technical specifications.

PART 2 PRODUCTS

2.1 General

The following are contract deliverables which expound upon and finalize the design parameters/requirements outlined within the contract documents. They shall be prepared in such a fashion that the Prime Contractor is responsible to the Government and not as an internal document between the Prime Contractor and its Sub Contractors, Vendors, Suppliers, etc.

2.2 Design Calculations

The design calculations shall be presented in a clean and legible form incorporating a title page and index for each volume. A table of contents, which shall be an index of the indices, shall be furnished when there is more than one volume. The source of loading conditions, supplementary sketches, graphs, formulae, and references shall be identified.

2.3 Specifications

Due to Schedule and limited amount time and number of Disciplines used Specifications shall be prepared in an outline format using Construction Specifications Institute (CSI) format. The Design-Build Contractor prepared specifications shall include as a minimum, all applicable specifications sections referenced by the CSI. Where the CSI does not reference a specification section for specific work to be performed by this contract, the Design-Build Contractor shall be responsible for creating the required specification.

2.4 Preparation of Proprietary Non-Generic Design Documents

During the course of design, the designer shall specify specific proprietary materials, equipment, systems, and patented processes by trade name, make, or catalog number. The subsequent use of construction submittals to supplant and/or supplement incomplete design effort is unacceptable. Design submittals containing non-proprietary and/or generic design criteria where proprietary items are available, will be returned for resubmission.

2.4.1 Quality Control and Testing

Specifications shall include required quality control and further indicate all testing to be conducted by the Design-Build Contractor, its Sub Contractors, vendors and/or suppliers.

2.5 AUTOCAD

AUTOCAD is required for all work related to this contract. The Contractor shall furnish the digital as-built drawing files in AUTOCAD version 2005. No other convention other than AUTOCAD shall be used. Drawings shall not be drawn in another cad format and converted to AUTOCAD.

2.5.1 Drawing Size

All drawings shall be prepared for metric size "A1" sheets (594mm by 841mm) or if approved by the contracting Officer of an internationally recognized size approximately 24 inches (60 cm) by 36 inches (90 cm). Drawings shall be trimmed to size if necessary.

2.5.2 Plotter Prepared Original Drawings

Plotter prepared original drawings shall be prepared on 20 pound bond paper, unless otherwise approved and shall be plotted on the matte side.

Raster plotters must provide a minimum resolution of 400 dpi while vector plotters shall provide a minimum resolution of 0.0010 inch with an accuracy of +0.1% of the move and a repeatability error of not more than 0.005 inch. Drawings produced from dot matrix plotters are not acceptable. Plots accompanied by the digital design file may be prepared on vellum: translucent bond is not acceptable. Line density shall be equivalent to that produced by black India ink: half-tones and gray scale plots are not acceptable unless otherwise approved. Manual changes to plotted originals are not acceptable.

Preparation of all work shall accommodate half size reduction unless instructed otherwise by the Contracting Officer.

Symbols and abbreviations shall be internationally recognized.

2.5.3 Binding

All volumes of drawing prints shall be firmly bound and shall have covers of heavier bond than the drawing sheets. If posts are used to fasten sheets together, the drilled holes on the bond edges of the sheets

shall be on 8-1/2-inch centers.

2.5.4 Legends

For each submittal, legends of symbols and lists of abbreviations shall be placed on the drawings. They shall include all of the symbols and abbreviations used in the drawing set, but shall exclude any symbols and abbreviations not used. Since many symbols are limited to certain design disciplines, there is a definite advantage to the use of separate legends on the initial sheet of each design discipline or in the Standard Details package for each discipline. If legends have not been shown by discipline, a legend shall be placed on the first drawing.

2.5.5 Design Discipline Designation Format

The drawing package shall be divided into the following proposed divisions:

Discipline Designation Discipline

- A. ARCHITECTURAL
- C. Civil
- S. Structural
- P. Plumbing, Process and Piping
- M. Mechanical Design
- FP Fire Protection and Life Safety
- E Electrical

2.5.6 Title and Revision Block

Title and revision block shall match FIGURE 1 through 5 furnished in the paragraph entitled ATTACHMENTS.

2.5.7 Index Sheet(s)

The first sheet of each volume in a project shall be a cover sheet. In general, the second sheet shall be the index.

2.5.8 Location Grid

To facilitate the location of project elements and the coordination of the various disciplines' drawings, all plans shall indicate a column line or planning grid, and all floor plans (except structural plans) shall show room numbers.

2.5.9 Composite and Key Plans

If the plan of a large building or structure must be placed on two or more sheets in order to maintain proper scale, the total plan shall be placed on one sheet at a smaller scale. Appropriate key plans and match lines shall appear on segmented drawings. Key plans shall be used not only to relate large scale plans to total floor plans but also to relate individual buildings to complexes of buildings. Key plans shall be drawn in a convenient location and shall indicate the relative location of the represented plan area by crosshatching. Provide on each building plan a key drawing indicating location of building on site. Each plan shall have a north arrow and a graphic scale. All plans with toilets shall have in addition to a north arrow a pointer indicating the direction of Mecca.

2.5.10 Revisions

Drawing revisions shall be prepared only on the original CADD files. A revision area is required on all sheets.

PART 3 EXECUTION

3.1 GENERAL

3.1.1 Design Concept Coordination Meeting

In addition to regular meetings with the Government the Contractor shall conduct formal status briefings on a monthly basis to provide a management overview of design development. Shortly after contract award the Government may choose to conduct meetings with the Design-Build Contractor to refine proposal concept features. The purpose of the meeting is to assure attention to project requirements and to suggest ways of improving the design prior to tentative level submissions.

3.1.2 Government Design Changes

Government design changes which do not increase construction costs shall be made at no additional design charge to the Government. (This provision will not apply where the Government has unreasonably packaged several and significant design changes with issues that both decrease and increase construction costs, with the effect of artificially resulting in no-cost construction. Moreover, this prohibition from additional design charges shall not apply where significant additional design costs are incurred by the contractor, through no fault of the contractor's, and where these changes have occurred to issues that were already well settled as the result of final approval action by the Government.) The Contracting Officer may request design submittals in addition to those listed when deemed necessary to adequately describe the work covered in the contract documents. Submittals shall be made in the respective number of copies and to the respective addresses set forth in the paragraph entitled SUBMITTAL PROCEDURE. Each submittal shall be complete and in sufficient detail to allow ready determination of compliance with contract requirements.

3.2 PROGRESS SCHEDULE

The Contractor shall prepare and submit a design progress schedule to the Contracting Officer. The Critical Path Method (CPM) of network calculation shall be used to generate the Project Schedule. The progress schedule shall show, as a percentage of the total design price, the various items included in the contract and the order in which the Contractor proposes to carry on the work, with dates on which he will start the features of the work and the contemplated dates for completing same. Significant milestones such as review submittals shall be annotated. The Contractor shall assign sufficient technical, supervisory and administrative personnel to insure the prosecution of the work in accordance with the progress schedule. The Contractor shall correct the progress schedule at the end of each month and shall deliver six

(6) copies to the Contracting Officer. The approved Project Schedule shall be used to measure the progress of the work, to aid in evaluating time extensions, and to provide the basis of all progress payments.

3.3 SCHEDULING

3.3.1 Design Submittals

The contractor shall schedule adequate time (a minimum of fifteen (15) working exclusive of mailing time) days for review and clearance by the Government for construction. Submittals shall be reviewed and the comments returned via e-mail from RE with appropriate coding. If the Contractor fails to submit design submittals in a timely fashion, or repetitively submits design submittals that are not in strict

conformance with the contract and approved design documents, no part of the time lost due to such actions shall be made the subject of claim for extension of time or for excess costs or damages by the Contractor.

3.3.2 Post Design Construction Submittals

Submittals covering component items forming a system or items that are interrelated shall be scheduled to be coordinated and submitted concurrently. Certifications to be submitted with the pertinent drawings shall be so scheduled. The Contractor shall schedule adequate time (a minimum of fifteen (15) working days exclusive of mailing time) for review and approval by the Government. If the Contractor fails to submit post design construction submittals in a timely fashion, or repetitively submits submittals that are not in strict conformance with the contract documents, no part of the time lost due to actions shall be made the subject of claim for extension of time or for excess costs or damages by the Contractor.

3.3.3 Mailing Time

The use of scanning e-mail for moving submittals is an option for the Contractor to cut out regular mail or hand delivery and speed up the handling process. Copies scanned must be clear and legible. The mailing time, mentioned in paragraphs 3.5.1 and 3.5.2 above, is restricted to the Contractor's mailing to the Government and the Government's mailing back to the Contractor at the conclusion of the Government's review for the transmittals involved. Mailing time between Government offices, which results through no fault of the Contractor's (such as failing to mail transmittals to the correct location) is not eligible for exclusion from the time taken by the Government to perform its review.

3.4 SUBMITTAL PROCEDURE

3.4.1 Design Submittals

3.4.1.1 Afghanistan Engineer District (AED)

Copies of all design submittals, and any other copies of design submittals specified in accordance with the figure 6 attachment to this section, shall be transmitted via DHL, FEDEX, UPS, or any other reputable courier service, to the Government at the following address by means of ENG Form 4025:

- U.S. Army Corps of Engineers Afghanistan Engineer District Qalaa House Kabul, Afghanistan
- a. RETURN OF GOVERNMENT REVIEWED SUBMITTALS. Subsequent to the Government review, the Eng Form 4025 with comments (if applicable) will be returned to the Design-build Contractor digitally by email. Hardcopies of these documents will subsequently be submitted to the Design-Build Contractor via the United States Postal Service (USPS). The Government may elect to stop sending hardcopies if it deems that digital transmission of design submittals is progressing satisfactorily.
- b. SUPPLEMENTAL ACTIONS. All supplemental actions, resubmittals, and subsequently scheduled submissions shall be performed by the Design-Build Contractor as indicated within this paragraph.
- U.S. Army Corps of Engineers Afghanistan Engineer District Qalaa House Kabul, Afghanistan

3.4.2 Submittal Numbering System

Instructions on the numbering system to be used for construction submittals follows:

3.4.3 Submittals

Shop drawings and materials are listed on the Submittal Register (ENG Form 4288) as follows:

a. List is prepared according to contract specifications and drawings, picking up all items involved in the project.

b. This list is divided into sections as indicated in the specifications for example:

Sec 01015 "Technical Requirements" Sec. 02831 "Chain-Link Fence"

3.4.3.1 Numbering procedures for transmittal on ENG FORM 4025

a. Each section, may include a list of items. All these items will then be listed with a progressive number within the sections they belong to, for example:

Sec. 01015 will have 01015.00 (Basic number)

Item x " " 01015.01 Item y " " 01015.02

Item z " " 01015.03

Sec. 02710 will have 02710.00 (Basic number)

Item x " " 02710.01 Item y " " 02710.02 Item z " " 02710.03

Sec. 02600 will have 02600.00 (Basic number)

Item x " " 02600.01 Item y " " 02600.02

Sec. 03300 will have 03300.00 (Basic number)

Item x " " 03300.01 Item y " " 03300.02

b. It is evident a transmittal will never show a Section number i.e., 02831.00, 03300.00, etc., since these are only the basic numbers of the system. Numbers on transmittals will be the item numbers, i.e., 01015.01, 02710.01, 02710.02, 02710.03, 03300.01, 03300.02, etc. All items, as listed on the Submittal Register, will be submitted via a separate transmittal form ENG FORM 4025 thus avoiding getting together more than one item (as listed) and more than one number. There are items, on the other hand, which may be submitted all together on the same transmittal form. This must be established before submission is made.

c. Sec. 10800 "Toilet Accessories" - this section will have basic number 10800.00 - all items relative to it will be listed one by one on separate lines. ONLY one transmittal number will then be given for all of these "10800.01" which will include i.e., robe hook, toilet paper holder, mirror, soap holder, cabinet for paper towels, etc. Each one of these items will be listed on the same Transmittal Number 10800.01 as item 1, item 2, item 3, etc.

3.4.3.2 Resubmittals

Should the Contractor be required to resubmit any transmittal, it will be accomplished by utilizing the same transmittal number followed by the number "-1" for the first resubmittal, "-2" for the second resubmittal, "-3" for the third resubmittal, etc. For example, a first resubmittal would be "SUBMITTAL PROCEDURES FOR DESIGN BUILD PROJECT" 01335.01-1, a second resubmittal 01335.01-2, etc. The purpose of this system is to avoid deviations from Submittal Register. Also, to avoid confusion arising from the use of

more than one number on transmittal when more than one item is submitted on the same form. This system will also facilitate the use, wherever required, on machine printouts.

3.4.4 Variations

If design documents or construction submittals show variations from the contract or approved design parameters and/or requirements, the Contractor shall justify such variations in writing, at the time of submission. Additionally, the Contractor shall also annotate block "h" entitled "variation" of ENG FORM 4025. After design submittals have been reviewed and cleared for construction by the Contracting Officer, no resubmittal for the purpose of substituting materials, equipment, systems, and patented processes will be considered unless accompanied by the following:

- a. Reason or purpose for proposed variation, substitution, or revision.
- b. How does quality of variation compare with quality of the specified item. This shall be in the form of a technical evaluation tabulating differences between the item originally specified and what is proposed.
- c. Provide a cost comparison. This shall include an acquisition and life cycle cost comparison.
- d. For proprietary materials, products, systems, and patented processes a certification signed by an official authorized to certify in behalf of the manufacturing company that the proposed substitution meets or exceeds what was originally specified.
- e. For all other actions, a certification signed by a licensed professional engineer or architect certifying that the proposed variation or revision meets or exceeds what was originally specified.
- f. Advantage to the Government, if variation is approved, i.e. Operation and Maintenance considerations, better product, etc.
- g. Ramifications and impact, if not approved. If the Government review detects any items not in compliance with contract requirements or items requiring further clarification, the Contractor will be so advised. Lack of notification by the Contracting Officer of any non-complying item does not relieve the Contractor of any contractual obligation.

3.4.5 Non-Compliance

The Contracting Officer will notify the Contractor of any detected noncompliance with the requirements of this specification. The Contractor shall take immediate corrective action after receipt of such notice. Such notice, when delivered to the Contractor at the worksite, shall be deemed sufficient for the purpose of notification. If the Contractor fails or refuses to comply promptly, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to such stop orders shall be made the subject of claim for extension of time or for excess costs or damages by the Contractor.

3.5 REVIEW OF CONTRACTOR PREPARED DESIGN DOCUMENTS

3.5.1 General

The work under contract will be subject to continuous review by representatives of the Contracting Officer. Additionally, joint design review conferences with representation by all organizations having a direct interest in the items under review may be held. The Design-Build Contractor shall furnish copies of all drawings and related documents to be reviewed at the review conference on or before the date indicated by the Government. Additional conferences pertaining to specific problems may be requested by the Design-Build Contractor or may be directed by the Contracting Officer as necessary to progress the work. The Design-Build Contractor shall prepare minutes of all conferences and shall furnish two copies to the Contracting Officer within seven (7) days after the conference.

3.5.2 Contractor's Quality Control Organization Review

This review shall be for the purposes of eliminating errors, interferences, and inconsistencies, and of incorporating design criteria, review comments, specifications, and any additional information required. Design submittals submitted to the Contracting officer without evidence of the Contractor's certified approval will be returned for resubmission. No part of the time lost due to such resubmissions shall be made the subject of claim for extension of time or for excess costs or damages by the Contractor.

3.5.3 Government Review

The Contractor shall not begin construction work until the Government has reviewed the Contractor's design and has cleared it for construction. Clearance for construction does not mean Government approval. Government review shall not be construed as a complete check but will evaluate the general design approach and adherence to contract parameters. The Government Review is often limited in time and scope. Therefore, the Contractor shall not consider any review performed by the Government as an excuse for incomplete work. Upon completion of the review, all comments will be forwarded to the Contractor. The Contracting Officer will indicate whether the design submittal has or has not been cleared for construction. Design submittals cleared for construction by the Contracting Officer shall not relieve the Contractor from responsibility for any design errors or omissions and any liability associated with such errors, nor from responsibility for complying with the requirements of this contract.

3.5.3.1 Incorporation of Government Review Comments

The Contractor shall use DR Checks as the communication mechanism for the Government's review comments. The review will be for conformance with the technical requirements and parameters of the contract documents. The Contractor shall either incorporate each comment or, if the Contractor disagrees technically and does not intend to comply with the comment(s), the Contractor shall clearly outline, with ample justification, its reasons for its noncompliance within five (5) days after receipt of the comment(s) in DR Checks. Additionally, the Contractor is cautioned in that if it believes the action required by any comment exceeds the requirements of this contract, that he should take no action and notify the Contracting Officer in writing immediately. The DR Checks review comments and the submittal material for each design review will become the basis for any ensuing design work. Copies of the DR Checks design review comments with the action taken on each comment noted, shall be bound in all succeeding volumes of the design analysis.

3.5.3.2 Conferences

As necessary, conferences will be conducted between the Design Build Contractor and the Government to resolve review comments. All comments will be transmitted via DR Checks. Design Build Team will be required to access system and receive all design comments through DR Checks.

3.5.4 Design Stages

The Contractor shall schedule the number and composition of the design submittal phases. Design submittals are required at the Concept (35%) and Final (95%) design stages and at the 100% design completion. The requirements of each design stage are listed hereinafter.

3.5.4.1 Construction Concept Review Submittal (35%)

The Concept Review Submittal (35%) shall be submitted to the Government within sixty (60) days after (NTP). The review of this submittal is primarily to ensure that the Contractor has taken an inventory of the existing conditions at each proposed site, has established the most desirable functional relationships between the various project elements, has provided the technical solution to how the functional and technical requirements will be met, and to show Contractor compliance (or justify noncompliance) with the design parameters and/or requirements.

The following documents shall be submitted:

Site Layout (to include main utilities lines)
Floor Plans for each discipline
Elevations
Key Sections
Design Analysis
Code Analysis
Draft Specifications
100% Grading Plan
Demolition Plan

3.5.4.2 Construction Design Development Review Submittal (65%)

The Design Development Review Submittal (65%) shall be submitted to the Government within one hundred (100) days after (NTP). The review of this submittal is to insure that the design is in accordance with directions provided the Contractor in the Scope of Work. The drawings shall include the incorporation of any design review comments generated by the Concept (35%) design review.

The following documents shall be submitted:

Final Site Layout (to include main utilities lines)
Floor Plans for each discipline
Elevations
Key Sections
Key Detail Drawings
Design Analysis
Code Analysis
Construction Specifications

3.5.4.3 Construction Review Submittal (95%)

The 95% Final Review shall be completed with all 35% review comments incorporated one hundred and thirty (130) days after notice to proceed (NTP) and submitted to the Government for review. The review of this submittal is to insure that the design is in accordance with directions provided the Contractor in the Scope of Work. The only effort remaining between the FINAL DESIGN REVIEW SUBMITTAL and the 100% READ-TO-BUILD is the incorporation of the Government Review Comments. The Contractor shall submit the following documents for Final review:

- a. Design Analysis developed to a 95% design stage. The Design Analysis shall be in its final form. It shall include all backup material previously submitted and revised as necessary. All design calculations shall be included. The Design Analysis shall contain all explanatory material giving the design rationale for any design decisions which would not be obvious to an engineer reviewing the Final Drawings and Specifications.
- b. 95% Complete Construction Specifications. The Draft Specifications on all items of work submitted for Review shall consist of proprietary specifications.
- c. 95% Complete Construction Drawings. The Contract Drawings submitted for Final Review shall include the drawings previously submitted which have been revised and completed as necessary. The Contractor is expected to have completed all of his coordination checks and have the drawings in a design complete condition. The drawings shall be finalized at this time including the incorporation of any design review comments generated by the Preliminary design review. The drawings shall contain all the details necessary

to assure a clear understanding of the work throughout construction.

d. The Government's 35% and 65% Design Review Comments with the Contractor's annotation to each comment.

3.5.4.4 Construction Final Review Submittal (100%)

After the review, the Contractor shall revise the Contract Documents by incorporating any comments generated during the Final Review Submittal and shall prepare final hard copy Construction Specifications. The Contractor shall submit the Design Completion Review Submittal (100%) to the Government within one hundred & fifty (150) days after NTP. The Contractor shall submit the following documents for the design complete submittal:

- a. Design Analysis
- b. Code Analysis
- c. Construction Specifications
- d. Construction Drawings
- e. The Government's FINAL (95%) DESIGN REVIEW SUBMITTAL comments with the Contractor's annotation to each comment.

3.5.4.5 Design Submittals not in Compliance

The Contractor shall, without additional compensation, correct or revise any errors or deficiencies in its design analysis, specifications, and drawings, and promptly furnish a corrected submittal in the form and number of copies as specified for the initial submittal. No part of the time lost due to such resubmissions shall be made the subject of claim for extension of time or for excess costs or damages by the Contractor. If the Contractor considers any correction indicated on the submittals to constitute a change to the contract, a notice shall be given promptly to the Contracting Officer.

3.5.4.6 General Design Instructions

3.5.4.6.1 Responsibility of the Design-Build Contractor

3.5.4.6.2 Professional Quality, Technical Accuracy, and Coordination

The Design-Build Contractor shall be responsible for the professional quality, technical accuracy, and the coordination of all designs, specifications, drawings, and other non-construction services furnished by the Contractor under this contract. Work must be organized in a manner that will assure thorough coordination between various details on drawings, between the various sections of the specifications, and between the drawings and specifications. The Design-Build Contractor shall thoroughly cross-check and coordinate all work until he is professionally satisfied that no conflicts exist, vital information has not been omitted, and that indefinite language open to interpretation has been resolved.

The standard of care for all design services performed under this agreement shall be the care and skill ordinarily used by members of the architectural or engineering professions practicing under similar conditions at the same time and locality. Notwithstanding the above, in the event that the contract specifies that portions of the work be performed in accordance with a performance standard, the design services shall be performed so as to achieve such standards.

3.5.6.3 Correction of Work

The Contractor shall, without additional compensation, correct or revise any errors or deficiency in its designs, drawings, specifications, and other non-construction services and perform any necessary rework or

modifications, including any damage to real or personal property, resulting from the design error or omission.

3.5.6.4 Government Oversight

The extent and character of the work to be done by the Design-Build Contractor shall be subject to the general oversight, supervision, direction, control, and review by the Contracting Officer.

Neither the Government's review, approval or acceptance of, nor payment for, the services required under this contact shall be construed to operate as a waiver of any rights under this contract or of any cause of action arising out of the performance of this contract. The Contractor shall be and remain liable to the Government in accordance with applicable law for all damages to the Government caused by the Contractor's negligent performance of any of these services furnished under this contract.

3.5.6.5 Design Deficiencies

Design deficiencies noted by the Government shall be corrected prior to the start of design for subsequent features of work which may be affected by, or need to be built upon, the deficient design work.

3.5.6.6 Design Discrepancies

The Design-Build Contractor shall be responsible for the correction of incomplete design data, omissions, and design discrepancies which become apparent during construction. The Design-Build Contractor shall provide the Contracting Officer with a proposed recommendation for correcting a design error, within three (3) calendar days after notification by the Contracting Officer. The Contracting Officer will notify the Design-Build Contractor of any detected noncompliance with the foregoing requirements. The Design-Build Contractor shall take immediate corrective action after receipt of such notice. Such notice, when delivered to the Design-Build Contractor at the worksite, shall be deemed sufficient for the purpose of notification. If the Design-Build Contractor fails or refuses to comply promptly, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to such stop orders shall be made the subject of claim for extension of time or for excess costs or damages by the Design-Build Contractor. Should extensions of design, fabrication plans and/or specific manufacturer's details be required as a result of a Government issued Change Order, the Government will make an equitable adjustment in accordance with Contract Clause 52.243-4 entitled CHANGES.

3.7 Phased or "Fast-Track" Design

3.7.1 General

Upon review by the Government, design and construction sequencing may be effected on an incremental basis as each approved phase or portion (e.g., demolition, geotechnical, site work, exterior utilities, foundations, substructure, superstructure, exterior closure, roofing, interior construction, mechanical, electrical, etc.) of the design is completed.

3.7.1.1 Design Phases

The design phases shall be in accordance with the Contractor Furnished Design Documents Submittal Register (TAC Form 122-E) as approved by the Contacting Officer.

3.7.1.2 Approval of TAC Form 122-E

In all cases, TAC Form 122-E indicating the proposed phasing shall be submitted for review and approval by the contracting Officer prior to initiation of any procurement action or commencement of any construction.

3.7.2 Sequence of Design-Construction (Fast-Track)

Notice to Proceed (NTP) shall be issued at the Planning Charrette that will be scheduled within one week of contract award. After receipt of the Contract Notice to Proceed (NTP) the Contractor shall initiate design, comply with all design submission requirements and obtain Government review of each submission. The Contractor may begin construction on portions of the work for which the Government has reviewed the final design submission and has determined satisfactory for purposes of beginning construction. The Contracting Officer will notify the Contractor when the design is cleared for construction. The Government will not grant any time extension for any design resubmittal required when, in the opinion of the Government, the initial submission failed to meet the minimum quality requirements as set forth in the contract.

3.7.3 Notice-to-Proceed for Limited Construction

If the Government allows the Contractor to proceed with limited construction based on pending minor revisions to the reviewed Final Design submission, no payment will be made for any in-place construction related to the pending revisions until they are completed, resubmitted and are satisfactory to the Government.

3.7.4 In-Place Construction Payment

No payment will be made for any in-place construction until all required submittals have been made, reviewed and are satisfactory to the Government.

3.7.5 Commencement of Construction

Construction of work may begin after receipt of the clearance for construction (Notice to Proceed) for each approved increment of work or material supplied. Any work performed by the Contractor prior to receipt of the clearance for construction, shall be at the Contractor's own risk and expense. Work cleared for construction that does not conform to the design parameters and/or requirements of this contract shall be corrected by the Contractor at no additional cost or time to the Government.

3.8 Partial Design Submittals

In the interest of expediting construction, the Contracting Officer may approve partial design submittals, procurement of materials and equipment, as well as issue the Notice To Proceed (NTP) for construction of those elements of the design which have been cleared for construction. Such partial notices to proceed shall be solely at the discretion of the Contracting Officer.

3.9 Design Submittals not in compliance with the contract documents

The Contractor shall, without additional compensation, correct or revise any errors or deficiencies in its design analysis, specifications, and drawings, and promptly furnish a corrected submittal in the form and number of copies as specified for the initial submittal. No part of the time lost due to such resubmissions shall be made the subject of claim for extension of time or for excess costs or damages by the Contractor. If the Contractor considers any correction indicated on the submittals to constitute a change to the contract, a notice shall be given promptly to the Contracting Officer.

3.10 GENERAL DESIGN INSTRUCTIONS

3.10.1 Responsibility of the Design-Build Contractor

3.10.1.1 Professional Quality, Technical Accuracy, and Coordination

The Design-Build Contractor shall be responsible for the professional quality, technical accuracy, and the coordination of all designs, specifications, drawings, and other non-construction services furnished by the Contractor under this contract. Work must be organized in a manner that will assure thorough coordination between various details on drawings, between the various sections of the specifications, and between the drawings and specifications. The Design-Build Contractor shall thoroughly cross-check and coordinate all work until he is professionally satisfied that no conflicts exist, vital information has not been omitted, and that indefinite language open to interpretation has been resolved.

The standard of care for all design services performed under this agreement shall be the care and skill ordinarily used by members of the architectural or engineering professions practicing under similar conditions at the same time and locality. Notwithstanding the above, in the event that the contract specifies that portions of the work be performed in accordance with a performance standard, the design services shall be performed so as to achieve such standards.

3.10.1.2 Correction of Work

The Contractor shall, without additional compensation, correct or revise any errors or deficiency in its designs, drawings, specifications, and other non-construction services and perform any necessary rework or modifications, including any damage to real or personal property, resulting from the design error or omission.

3.10.1.3 Government Oversight

The extent and character of the work to be done by the Design-Build Contractor shall be subject to the general oversight, supervision, direction, control, and review by the Contracting Officer.

Neither the Government's review, approval or acceptance of, nor payment for, the services required under this contact shall be construed to operate as a waiver of any rights under this contract or of any cause of action arising out of the performance of this contract. The Contractor shall be and remain liable to the Government in accordance with applicable law for all damages to the Government caused by the Contractor's negligent performance of any of these services furnished under this contract.

3.10.1.4 Unlimited Drawing Rights

The Government shall have unlimited rights in all drawings, designs, specifications, notes and all other works developed in the performance of this contract, including the right to use same on any other Government design or construction without additional compensation to the Design-Build Contractor. The Design-Build Contractor hereby grants to the Government a paid-up license throughout the world to all such works to which he may assert or establish any claim under design patent or copyright laws.

3.10.1.5 Conflicts

Any conflicts, ambiguities, questions or problems encountered by the Design-Build Contractor in following the criteria shall be immediately submitted in writing to the Contracting Officer with the Design-Build Contractor's recommendations. Prior to submission to the Government the Design-Build Contractor shall take appropriate measures to obtain clarification of design criteria requirements, to acquire all pertinent design information, and to incorporate such information in the work being performed.

3.10.1.6 Design Specialists

Whenever a design specialist is required, the Design-Build Contractor shall submit for the approval by Contracting Officer, the name of the designated specialist along with the individual's educational background, experience, and licenses or registrations held, before design work commences. The design specialists shall be registered architects, registered professional engineers, or recognized consultants with a background of at least five (5) years design experience in the appropriate specialty. Services of design specialists may be required for the following specialties:

3.10.2 Conduct of Work

In the performance of contract the Design-Build Contractor shall:

3.10.2.1 Performance

Perform the work diligently and aggressively, and promptly advise the Contracting Officer of all significant developments.

3.10.2.2 Telephone Conversations

Prepare a summary, and promptly furnish a copy thereof to the Contracting Officer, of all telephone conversations relating to the design work under this contract.

3.10.2.3 Cooperation with Others

Cooperate fully with other firms, consultants and Contractors performing work under the program to which this contract pertains, upon being advised by the Contracting Officer that such firms or individuals have a legitimate interest in the program, have need-to-know status, and proper security clearance where required.

3.10.2.4 Technical Criteria

All designs, drawings, and specifications shall be prepared in accordance with the contract documents and with the applicable publications referenced therein. As soon as possible, the Design-Build Contractor shall obtain copies of all publications applicable to this contract. Any deviations from the technical criteria contained in the contract documents or in the applicable publications, including the use of criteria obtained from the user or other sources, must receive prior approval of the Contracting Officer. Where the technical criteria contained or referred to herein is not met, the Design-Build Contractor will be required to conform his design to the same at his own time and expense.

3.10.3 Design Priorities

The design of this project shall consider the location and environment of this project and the impact this will have on sources of technical supply, the cost of construction, the low level of maintenance, and the difficulty of obtaining replacement parts. Unless stated otherwise in this contract, the following design priorities shall be followed:

- 3.10.3.1 Life-Span Construction must have an expected life span of 20 years.
- 3.10.3.2 Maintainability Low maintenance materials and systems must be employed.

3.10.3.3 Operability

Systems including but not necessarily limited to mechanical, electrical, communications, etc., must be simple to operate and easy to maintain.

3.10.3.4 Standardization

Use of standardized materials, products, equipment, and systems is necessary to minimize the requirements for replacement parts, storage facilities, and service requirements.

3.10.3.5 Overseas Work

Use of construction materials or techniques which are suitable for overseas work in harsh climates and environments.

3.10.4 ACCIDENT PREVENTION

The Contractor shall comply with the most recent edition of applicable portions of the USACE Engineering Manual (EM) 385-1-1, Safety and Health Requirements Manual. The Contractor shall obtain a copy of EM 385-1-1 and be familiar with all provisions prior to submitting their Accident Prevention Plan. Within fifteen (15) days prior to the accident prevention pre-work conference, four (4) copies of the Accident Prevention Plan are required. The Contractor shall not commence physical work at the site until the Accident Prevention Plan has been reviewed and accepted by the Contracting Officer or authorized representative. The Accident Prevention Plan shall follow the specified format and meet all requirements listed in Appendix "A" of EM 385-1-1.

On large or complex jobs the first phase may be presented in detail with the submittal of the Accident Prevention Plan with details of future phases to follow. A proposed outline for future phases must be submitted as part of the initial Accident Prevention Plan. Accident Prevention Plans will be reviewed for effectiveness by the Contractor at least monthly with a signature sheet signed and dated documenting that these reviews took place. Proposed revisions of the Accident Prevention Plan by the Contractor shall be submitted to the USACE Contracting Officer or authorized representative for review, and acceptance or denial, prior to becoming effective.

3.10.4 Asbestos Containing Materials

Asbestos containing material (ACM) will not be used in the design of new structures or systems. In the event no other material is available which will perform the required function or where the use of other material would be cost prohibitive, a waiver for the use of asbestos containing materials must be obtained from CETAC.

3.10.5 Existing Construction

Asbestos containing materials (ACM) presently included in existing construction to be rehabilitated or otherwise modified as a result of this project, shall be removed and a non-asbestos containing material substituted in lieu thereof.

3.10.6 Suspected Asbestos Containing Materials

All such structures and systems shall be inspected to determine the presence or probable presence of ACM. When ACM is suspected, a documented survey will be performed. The survey will be developed into an abatement design and will be made a part of the design documents. In the event no other material is available which will perform the required function or the use of a substitute material would be cost prohibitive due to initial cost and tear-out of existing construction, a waiver for the retention of the asbestos containing material must be obtained from the Contracting Officer.

3.11. Architectural/Interior Design

The Contractor shall provide samples, literature or schedules, as indicated below.

3.11.1 Prior to ordering materials provide a Door and Hardware Schedule with manufacturer's data sheets.

3.12 Finish Materials

Provide prior to ordering materials, a minimum of three (3) color boards of all approved selections. This includes but is not limited to paints, carpets, ceramic tile, etc.

3.12.1 Other Information

Any other information or computations required to permit verification that the design complies with the design criteria, codes, and standards and is satisfactory for the intended purpose.

3.12.2 Catalog Cuts

As a minimum, catalog cuts for all major items of equipment shall be submitted. Catalog cuts shall be a part of the Submittals.

3.13 Equipment Sizing

Equipment sizing calculations to support the selection of all equipment shall be shown in the design analysis.

3.13.1 Special Mechanical Systems and Equipment

Equipment sizing calculations to support the selection of all equipment and seismic supports shall be shown in the design analysis.

3.13.2 Electrical

3.13.3 Narrative

Contractor shall provide generators for building power. Power from the local utility will not be used at this time.

3.13.4 Specifications

Contractor shall provide specifications for each system to be provided under this contract. Specifications shall indicate applicable design standards and criteria followed, standards that the selected equipment and material shall comply with, method of equipment installation, and other construction requirements that the designer may see fit.

3.13.5 Catalog Cuts

The catalog cuts shall be provided for all types of equipment to be installed under this contract. Cuts shall include the manufacturers name, address and the telephone number; rating and physical size of equipment; and the standard it meets, such as DIN, BS, or UL. Equipment or device selected by the designer shall be identified on a catalog cut which lists multiple items.

3.14 SUBMITTAL OF CONTRACTOR FURNISHED DESIGN DRAWINGS G2 INTELLIGENCE COMMAND & HEADQUARTERS SECURITY BRIGADE Afghanistan

Kabul,

The following specific items shall be shown on the drawings when applicable, for each submittal.

3.14.1 Generators, Panels, Electrical items. Refer to specification section 01015.

3.15 TECHNICAL REQUIREMENTS

3.15.1 Architectural

Each submittal shall include the following:

3.15.2 Floor Plans

Provide a floor plan showing functional arrangements and circulation elements to scale, as well as the following:

- a. All major dimensions.
- b. Functional identification of each area.
- c. Openings in walls.
- d. Adjacent site related features such as stoops, etc.
- 3.15.3 Building Elevations each Elevation shall

show the following:

- a. Changes to fenestration.
- b. Identification of all building materials.
- c. Clear definition of new and existing elements.

3.15.4 Building Sections

Provide Building Sections showing placement of electrical features where applicable.

3.15.5 Reflected Ceiling Plan

Provide a reflected ceiling plan showing placement of electrical features where applicable.

3.15.6 Heating 01015 TECHNICAL REQUIREMENTS

3.15.7 Drawing Requirements

The following specific items shall be shown when applicable.

a. Cut Sheets and Specifications on equipment used

3.16 GOVERNMENT APPROVED CONSTRUCTION

SUBMITTALS (Required During Construction)

3.16.1 General

Since this contract requires that the drawings and specifications specify specific proprietary materials, equipment, systems, and patented processes by trade name, make, or catalog number, it is anticipated that construction shop drawings will primarily be limited to construction plans (e.g., Contractor Quality

Control, Accident Prevention, Resident Management System, Area Use etc), schedules (Project Schedule), certificates of compliance, reports, records/statements and variations.

3.16.1.1 Variations

After design submittals have been reviewed and cleared for construction by the Contracting Officer, no submittal for the purpose of substituting materials, equipment, systems, and patented processes will be considered by the Government unless submitted in accordance with the paragraph entitled VARIATIONS.

3.16.1.2 Additional Shop Drawings and Submittals

In accordance with the paragraph entitled DESIGN DISCREPANCIES, the Government may request the Design-Build Contractor to provide additional shop drawing and submittal type data subsequent to completion of the design.

3.16.2 Incomplete Design

The Design-Build Contractor shall not use construction submittals as a means to supplant and/or supplement an incomplete design effort.

3.16.3 Government Approval of Construction Submittals

The approval of construction submittals by the Contracting Officer shall not be construed as a complete check, but will indicate only that the general method of design construction, materials, detailing and other information are satisfactory. Approval will not relieve the Design-Build Contractor of the responsibility for any error which may exist, as it is the sole responsibility of the Design-Build Contractor to certify that each submittal has been reviewed in detail and is in strict conformance with all the contract documents and design criteria referenced therein.

3.16.4 Submittals

Submittals (other than shop drawings) shall be limited to items such as Plans (e.g., Quality Control Plan, Accident Prevention Plan, Area Use Plan etc.), Certificates of Compliance, Installation Instructions, Manufacturer's Catalog Data, Descriptive Literature/Illustrations, Factory and Field Test Reports, Performance and Operational Test Data Reports, Records, Operation and Maintenance Manuals, and required variations.

3.16.5 Government Review

Upon completion of review of construction submittals requiring Government approval, the submittals will be identified as having received approval by being so stamped and dated. Three (3) copies of the submittal will be retained by the Contracting Officer and one (1) copy of the submittal will be returned to the Design-Build Contractor.

3.16.6 For Information Only Submittals

These submittals shall be checked, stamped, signed and dated by the Design-Build Contractor's Quality Control Engineer, certifying that such submittal complies with the contract requirements. All Contractor submittals shall be subject to review by the Government at any time during the course of the contract. Any Contractor submittal found to contain errors or omissions shall be resubmitted as one requiring "approval". No adjustment for time or money will be allowed for corrections required as a result of noncompliance with plans or specifications. Normally submittals for information only will not be returned. Approval of the

Contracting Officer is not required on information only submittals. These submittals will be used for information purposes. The Government reserves the right to require the Design-Build Contractor to resubmit any item found not to comply with the contract. This does not relieve the Design-Build Contractor from the obligation to furnish material conforming to the plans and specifications and will not prevent the Contracting Officer from requiring removal and replacement if nonconforming material is incorporated in the work.

3.17 ATTACHMENTS

The following attachments form an integral part of this specification:

ENG FORM 4025 - Transmittal of Shop Drawings, Equipment Data, Material Samples, or Manufacturer's Certificate of Compliance (2 pages)

TAC FORM 122-E - Contractor Furnished Design Documents Submittal Register (NOTE: NOT USED)

ENG FORM 4288 - Submittal Register

Figure 1 - Index Sheet Logo/Signature Block (A-E)

Figure 2 - Continuation Sheet Logo/Signature Block (A-E)

Figure 3 - Title Block for Continuation Sheets

Figure 4 - Revision Block

Figure 5 - Finished Format Size

-- End of Section --

SECTION 01415

METRIC MEASUREMENTS

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM E 380 (1993) Practice for Use of the International

System of Units (SI)

ASTM E 621 (1994) Practice for Use of Metric (SI) Units in

Building Design and Construction

1.2 GENERAL

This project includes metric units of measurements. The metric units used are the International System of Units (SI) developed and maintained by the General Conference on Weights and Measures (CGPM); the name International System of Units and the international abbreviation SI were adopted by the 11th CGPM in 1960. A number of circumstances require that both metric SI units and English inch-pound (I-P) units be included in a section of the specifications. When both metric and I-P measurements are included, the section may contain measurements for products that are manufactured to I-P dimensions and then expressed in mathematically converted metric value (soft metric) or, it may contain measurements for products that are manufactured to an industry recognized rounded metric (hard metric) dimensions but are allowed to be substituted by I-P products to comply with the law. Dual measurements are also included to indicate industry and/or Government standards, test values or other controlling factors, such as the code requirements where I-P values are needed for clarity or to trace back to the referenced standards, test values or codes.

1.3 USE OF MEASUREMENTS

Measurements shall be either in SI or I-P units as indicated, except for soft metric measurements or as otherwise authorized. When only SI or I-P measurements are specified for a product, the product shall be procured in the specified units (SI or I-P) unless otherwise authorized by the Contracting Officer. The Contractor shall be responsible for all associated labor and materials when authorized to substitute one system of units for another and for the final assembly and performance of the specified work and/or products.

1.3.1 Hard Metric

A hard metric measurement is indicated by an SI value with no expressed correlation to an I-P value, i.e., where an SI value is not an exact mathematical conversion of an I-P value, such as the use of 100 mm in lieu of 4 inches. Hard metric measurements are often used for field data such as distance from one point to another or distance above the floor. Products are considered to be hard metric when they are manufactured to metric dimensions or have an industry recognized metric designation.

1.3.2 Soft Metric

- a. A soft metric measurement is indicated by an SI value which is a mathematical conversion of the I-P value shown in parentheses (e.g.
- 38.1 mm (1-1/2 inches)). Soft metric measurements are used for measurements pertaining to products, test values, and other situations where the I-P units are the standard for manufacture, verification, or other controlling factor. The I-P value shall govern while the metric measurement is provided for information.
- b. A soft metric measurement is also indicated for products that are manufactured in industry designated

metric dimensions but are required by law to allow substitute I-P products. These measurements are indicated by a manufacturing hard metric product dimension followed by the substitute I-P equivalent value in parentheses (e.g., 190 x 190 x 390 mm (7-5/8 x 7-5/8 inches)).

1.3.3 Neutral

A neutral measurement is indicated by an identifier which has no expressed relation to either an SI or an I-P value (e.g., American Wire Gage (AWG) which indicates thickness but in itself is neither SI nor I-P).

1.4 COORDINATION

Discrepancies, such as mismatches or product unavailability, arising from use of both metric and non-metric measurements and discrepancies between the measurements in the specifications and the measurements in the drawings shall be brought to the attention of the Contracting Officer for resolution.

1.5 RELATIONSHIP TO SUBMITTALS

Submittals for Government approval or for information only shall cover the SI or I-P products actually being furnished for the project. The Contractor shall submit the required drawings and calculations in the same units used in the contract documents describing the product or requirement unless otherwise instructed or approved. The Contractor shall use ASTM E 380 and ASTM E 621 as the basis for establishing metric measurements required to be used in submittals.

-- End of Section -

SECTION 01452

CONTRACTOR QUALITY CONTROL

PART 1 GENERAL

1.1 PAYMENT

Separate payment will not be made for providing and maintaining an effective Quality Control program, and all costs associated therewith shall be included in the applicable unit prices or lump-sum prices contained in the Section 00010 Supplies or Services and Prices/Costs.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.1 GENERAL

The Contractor is responsible for quality control and shall establish and maintain an effective quality control system in compliance with the Contract Clause titled "Inspection of Construction." The quality control system shall consist of plans, procedures, and organization necessary to produce an end product that complies with the contract requirements. The system shall cover all design and construction operations, both onsite and offsite, and shall be keyed to the proposed construction sequence. The site project superintendent will be held responsible for the quality of work on the job and is subject to removal by the Contracting Officer for non-compliance with the quality requirements specified in the contract. The site project superintendent in this context shall be the highest-level manager responsible for the overall construction activities at the site, including quality and production. The site project superintendent shall maintain a physical presence at the site at all times, except as otherwise acceptable to the Contracting Officer, and shall be responsible for all construction and construction related activities at the site.

3.2 QUALITY CONTROL PLAN

3.2.1 General

The Contractor shall furnish for review by the Government, not later than 30 days after receipt of Notice to Proceed, the Contractor Quality Control (CQC) Plan proposed to implement the requirements of the Contract Clause titled "Inspection of Construction." The plan shall identify personnel, procedures, control, instructions, tests, records, and forms to be used. The Government will consider an interim plan for the first 15 days of operation. Design and construction will be permitted to begin only after acceptance of the CQC Plan or acceptance of an interim plan applicable to the particular feature of work to be started. Work outside of the features of work included in an accepted interim plan will not be permitted to begin until acceptance of a CQC Plan or another interim plan containing the additional features of work to be started.

3.2.2 Content of the CQC Plan

The CQC Plan shall include, as a minimum, the following to cover all construction operations, both onsite and offsite, including work by subcontractors, fabricators, suppliers, and purchasing agents:

- a. A description of the quality control organization.
- b. The name, qualifications (in resume format), duties, responsibilities, and authorities of each person assigned a CQC function.
- c. A copy of the letter to the CQC System Manager signed by an authorized official of the firm which describes the responsibilities and delegates sufficient authorities to adequately perform the functions of the CQC System Manager.
- d. Procedures for scheduling, reviewing, certifying, and managing submittals, including those of subcontractors, offsite fabricators, suppliers, and purchasing agents.
- e. Control, verification, and acceptance testing procedures.

f. Procedures for tracking construction deficiencies from identification through acceptable corrective action.

3.2.3 Acceptance of Plan

Acceptance of the Contractor's plan is required prior to the start of construction. Acceptance is conditional and will be predicated on satisfactory performance during the construction period. The Government reserves the right to require the Contractor to make changes in his CQC Plan and operations including removal of personnel, as necessary, to obtain the quality specified.

3.3 COORDINATION MEETING

After the Preconstruction Conference, before start of construction, post award Conference, before start of design or construction, and prior to acceptance by the Government of the CQC Plan, the Contractor shall meet with the Contracting Officer or Authorized Representative and discuss the Contractor's quality control system. The CQC Plan shall be submitted for review a minimum of 7 calendar days prior to the Coordination Meeting. During the meeting, a mutual understanding of the system details shall be developed, including the forms for recording the CQC operations, design activities, control activities, testing, administration of the system for both onsite and offsite work, and the interrelationship of Contractor's Management and control with the Government's Quality Assurance. Minutes of the meeting shall be prepared by the Contractor and signed by both the Contractor and the Contracting Officer. The minutes shall become a part of the contract file. There may be occasions when subsequent conferences will be called by either party to reconfirm mutual understandings and/or to address deficiencies in the CQC system or procedures that may require corrective action by the Contractor.

3.4 QUALITY CONTROL ORGANIZATION

3.4.1 General

The requirements for the CQC organization are a CQC System Manager and sufficient number of additional qualified personnel to ensure contract compliance. The Contractor shall provide a CQC organization that shall be at the site at all times during progress of the work and with complete authority to take any action necessary to ensure compliance with the contract. All CQC staff members shall be subject to acceptance by the Contracting Officer.

3.4.2 CQC System Manager

The Contractor shall identify as CQC System Manager an individual within the onsite work organization who shall be responsible for overall management of CQC and have the authority to act in all CQC matters for the Contractor. The CQC System Manager shall be a graduate engineer with a minimum of 5 years construction experience on construction similar to this contract. This CQC System Manager shall be on the site at all times during construction and shall be employed by the prime Contractor. The CQC System Manager shall be assigned no other duties. An alternate for the CQC System Manager shall be identified in the plan to serve in the event of the System Manager's absence. The requirements for the alternate shall be the same as for the designated CQC System Manager.

3.4.3 CQC Personnel

In addition to CQC personnel specified elsewhere in the contract, the Contractor may provide as part of the CQC organization specialized personnel to assist the CQC System Manager for the following areas: electrical, mechanical, civil, structural, architectural, submittals clerk. These individuals shall be directly employed by the prime Contractor and may not be employed by a supplier or sub-contractor on this project; be responsible to the CQC System Manager; be physically present at the construction site during work on their areas of responsibility; have the necessary education and/or experience in accordance with the experience matrix listed herein. These individuals shall have no other duties other than quality control.

Experience Matrix

Area Qualifications

a. Civil QC - Graduate Civil Engineer with 2 years experience in the type of work being performed on this project or technician with 5 yrs related experience

- b. Mechanical QC Graduate Mechanical Engineer with 2 yrs experience or technician with 5 yrs related experience
- c. Electrical QC Graduate Electrical Engineer with 2 yrs related experience or technician with 5 yrs related experience
- d. Structural QC Graduate Structural Engineer with 2 yrs experience or technician with 5 yrs related experience
- e. Architectural QC Graduate Architect with 2 yrs experience or technician with 5 yrs related experience
- f. Submittals QC Submittal Clerk with 1 yr experience

3.4.5 Organizational Changes

The Contractor shall maintain the CQC staff at full strength at all times. When it is necessary to make changes to the CQC staff, the Contractor shall revise the CQC Plan to reflect the changes and submit the changes to the Contracting Officer for acceptance.

3.5 SUBMITTALS AND DELIVERABLES

Submittals, if needed, shall be made as specified in Section 01335 SUBMITTAL PROCEDURES. The CQC organization shall be responsible for certifying that all submittals and deliverables are in compliance with the contract requirements.

3.6 CONTROL

Contractor Quality Control is the means by which the Contractor ensures that the construction, to include that of subcontractors and suppliers, complies with the requirements of the contract. At least three phases of control shall be conducted by the CQC System Manager for each definable feature of work as follows:

3.6.1 Preparatory Phase

This phase shall be performed prior to beginning work on each definable feature of work, after all required plans/documents/ materials are approved/accepted, and after copies are at the work site. This phase shall include:

- a. A review of each paragraph of applicable specifications, reference codes, and standards. A copy of those sections of referenced codes and standards applicable to that portion of the work to be accomplished in the field shall be made available by the Contractor at the preparatory inspection. These copies shall be maintained in the field and available for use by Government personnel until final acceptance of the work.
- b. A review of the contract drawings.
- c. A check to assure that all materials and/or equipment have been tested, submitted, and approved.
- d. Review of provisions that have been made to provide required control inspection and testing.
- e. Examination of the work area to assure that all required preliminary work has been completed and is in compliance with the contract.
- f. A physical examination of required materials, equipment, and sample work to assure that they are on hand, conform to the contract and are properly stored.
- g. A review of the appropriate activity hazard analysis to assure safety requirements are met.
- h. Discussion of procedures for controlling quality of the work including repetitive deficiencies. Document construction tolerances and workmanship standards for that feature of work.
- A check to ensure that the portion of the plan for the work to be performed has been accepted by the Contracting Officer.
- j. Discussion of the initial control phase.

The Government shall be notified at least 48 hours in advance of beginning the preparatory control phase. This phase shall include a meeting conducted by the CQC System Manager and attended by the superintendent, other CQC personnel (as applicable) and the foreman responsible for the definable feature. The results of the preparatory phase actions shall be documented by separate minutes prepared by the CQC System Manager and attached to the daily CQC report.

3.6.2 Initial Phase

This phase shall be accomplished at the beginning of a definable feature of work. The following shall be accomplished:

- a. A check of work to ensure that it is in full compliance with contract requirements. Review minutes of the preparatory meeting.
- b. Establish level of workmanship and verify that it meets minimum acceptable workmanship standards. Compare with required sample panels as appropriate.
- c. Resolve all differences.
- d. The Government shall be notified at least 48 hours in advance of beginning the initial phase. Separate minutes of this phase shall be prepared by the CQC System Manager and attached to the daily CQC report.

3.6.3 Follow-Up Phase

Daily checks shall be performed to assure control activities, including control testing, are providing continued compliance with contract requirements, until completion of the particular feature of work. The checks shall be made a matter of record in the CQC documentation. Final follow-up checks shall be conducted and all deficiencies corrected prior to the start of additional features of work, which may be affected by the deficient work. The Contractor shall not build upon nor conceal non-conforming work.

3.7 TESTS

3.7.1 Testing Procedures

The Contractor shall perform specified or required tests to verify that control measures are adequate to provide a product that conforms to contract requirements. Upon request, the Contractor shall furnish to the Government duplicate samples of test specimens for possible testing by the Government. Testing includes operation and/or acceptance tests when specified. Results of all tests taken, both passing and failing tests, shall be recorded on the CQC report for the date taken. Specification paragraph, reference and location where the test(s) were taken.

3.8 COMPLETION INSPECTION

3.8.1 Punch-Out Inspection

Near the completion of all work or any increment thereof established, the CQC System Manager shall conduct an inspection of the work and develop a punch list of items which do not conform to the approved drawings and specifications. Such a list of deficiencies shall be included in the CQC documentation, as required by paragraph DOCUMENTATION below, and shall include the estimated date by which the deficiencies will be corrected. The CQC System Manager or staff shall make a second inspection to ascertain that all deficiencies have been corrected. Once this is accomplished, the Contractor shall notify the Government that the facility is ready for the Government Pre-Final inspection.

3.8.2 Pre-Final Inspection

The Government will perform this inspection to verify that the facility is complete and ready to be occupied. A Government Pre-Final Punch List may be developed as a result of this inspection. The Contractor's CQC System Manager shall ensure that all items on this list have been corrected before notifying the Government so that a Final inspection with the customer can be scheduled. Any items noted on the Pre-Final inspection shall be corrected in a timely manner. These inspections and any deficiency corrections required by this paragraph shall be accomplished within the time slated for completion of the entire work or any particular increment thereof if the project is divided into increments by separate completion dates.

3.8.3 Final Acceptance Inspection

The Contractor's Quality Control Inspection personnel, plus the superintendent or other primary management person, and the Contracting Officer's Representative shall be in attendance at this inspection. The final acceptance

inspection will be formally scheduled by the Contracting Officer based upon results of the Pre-Final inspection. Notice shall be given to the Contracting Officer at least 14 days prior to the final acceptance inspection and shall include the Contractor's assurance that all specific items previously identified to the Contractor as being unacceptable, along with all remaining work performed under the contract, will be complete and acceptable by the date scheduled for the final acceptance inspection. Failure of the Contractor to have all contract work acceptably complete for this inspection will be cause for the Contracting Officer to bill the Contractor for the Government's additional inspection cost.

3.9 DOCUMENTATION

The Contractor shall maintain current records providing factual evidence that required quality control activities and/or tests have been performed. These records shall include the work of subcontractors and suppliers and shall be on an acceptable form that includes, as a minimum, the following information:

- a. Contractor/subcontractor and their area of responsibility.
- b. Operating plant/equipment with hours worked, idle, or down for repair.
- c. Work performed each day, giving location, description, and by whom. When Network Analysis (NAS) is used, identify each phase of work performed each day by NAS activity number.
- d. Test and/or control activities performed with results and references to specifications/drawings requirements. The control phase should be identified (Preparatory, Initial, Follow-up). List deficiencies noted along with corrective action.
- e. Quantity of materials received at the site with statement as to acceptability, storage, and reference to specifications/drawings requirements.
- f. Submittals and deliverables reviewed, with contract reference, by whom, and action taken.
- g. Off-site surveillance activities, including actions taken.
- h. Project evaluations stating what was checked, results, and instructions or corrective actions.
- i. Instructions given/received and conflicts in plans and/or specifications.
- i. Contractor's verification statement.

These records shall indicate a description of trades working on the project; the number of personnel working; weather conditions encountered; and any delays encountered. These records shall cover both conforming and deficient features and shall include a statement that equipment and materials incorporated in the work and workmanship comply with the contract. The original and one copy of these records in report form shall be furnished to the Government daily within 12 hours after the date covered by the report, except that reports need not be submitted for days on which no work is performed. Reports shall be signed and dated by the CQC System Manager. The report from the CQC System Manager shall include copies of test reports and copies of reports prepared by all subordinate quality control personnel.

3.10 NOTIFICATION OF NONCOMPLIANCE

The Contracting Officer will notify the Contractor of any detected noncompliance with the foregoing requirements. The Contractor shall take immediate corrective action after receipt of such notice. Such notice, when delivered to the Contractor at the work site, shall be deemed sufficient for the purpose of notification. If the Contractor fails or refuses to comply promptly, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to such stop orders shall be made the subject of claim for extension of time or for excess costs or damages by the Contractor.

-- End of Section --

APPENDIX A SITE PHOTOGRAPHS BALA HISSAR KABUL, AFGHANISTAN

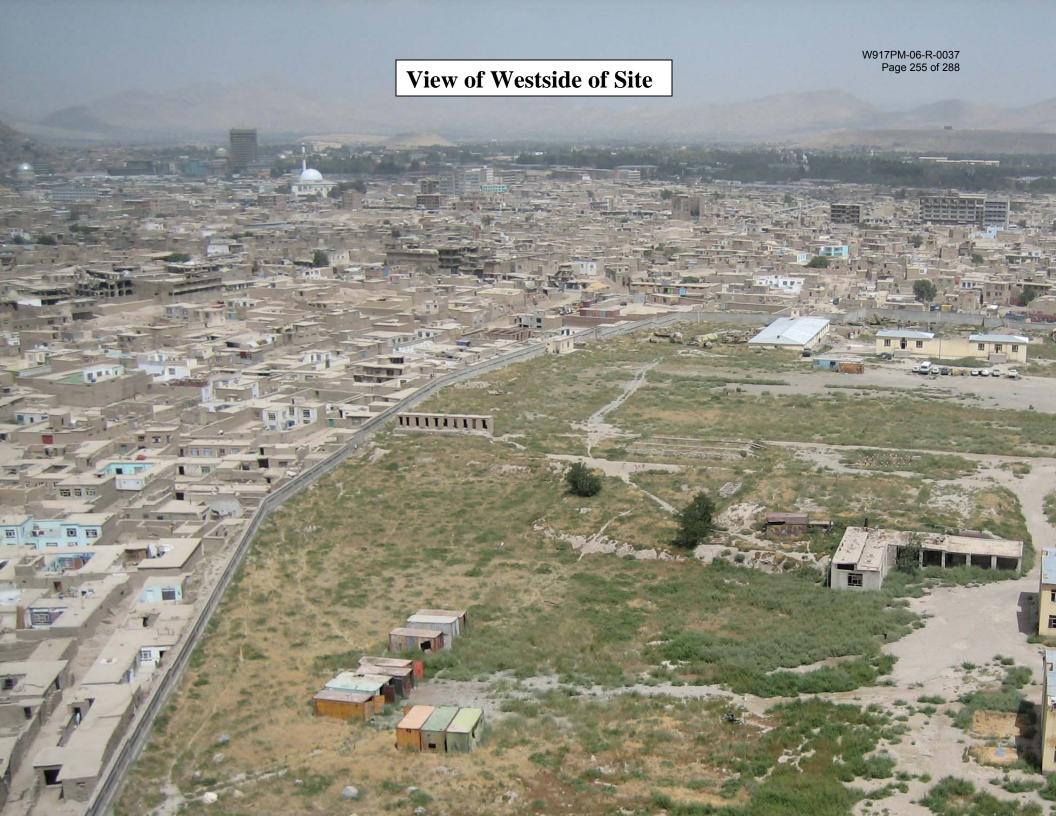
The Bala Hissar site photos depicted here show the area to be developed for the G2 Intelligence Command and Headquarters Security Brigade Site. Until the site design is complete, it cannot be determined whether an existing building or foundation shall remain or be removed, or whether the site requires little or significant grading. The selected site offers the designer the opportunity to shape the site with much flexibility, while still meeting the general master plan requirements.

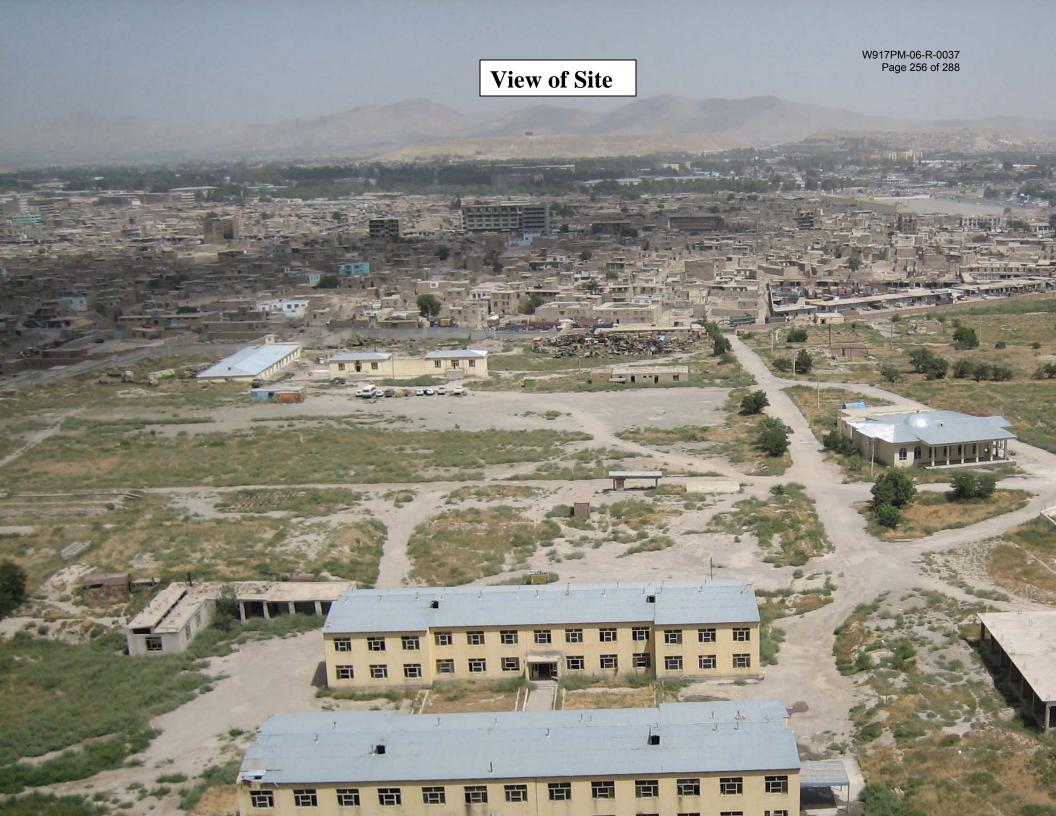
The site has varying degrees of risk due to unexploded ordnance, and therefore requires an unexploded ordnance survey to assess the risk. If unexploded ordnance is discovered, the contractor is required to remediate the potential risk of unexploded ordnance.

View of Southside of Bala Hissar

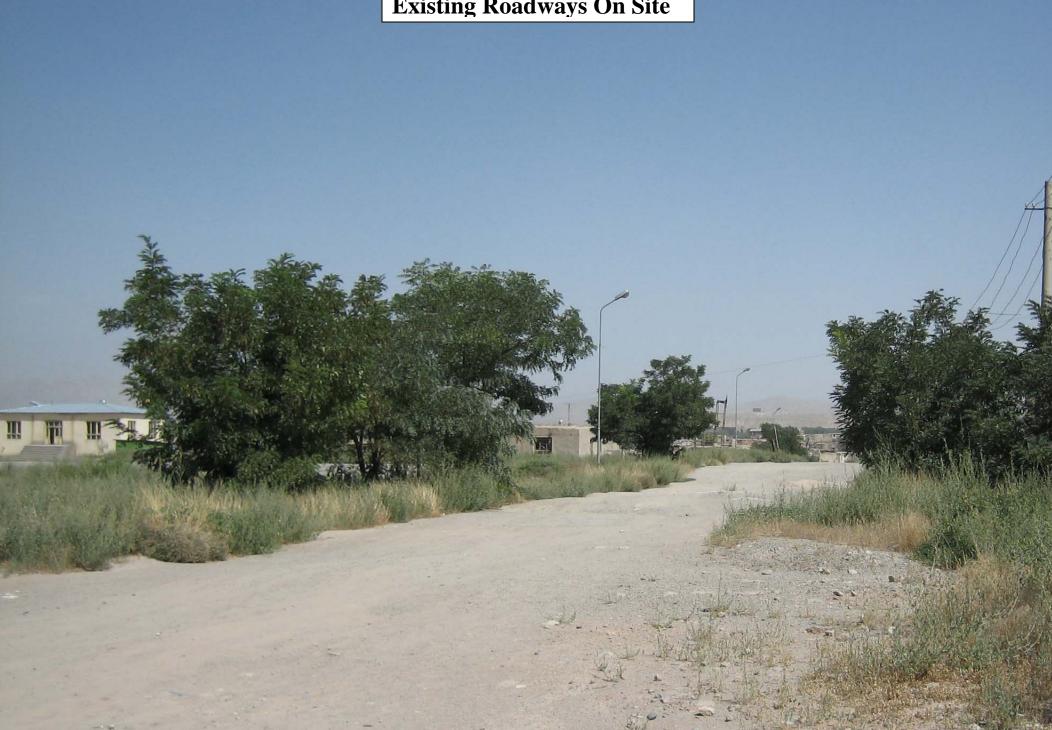








Existing Roadways On Site

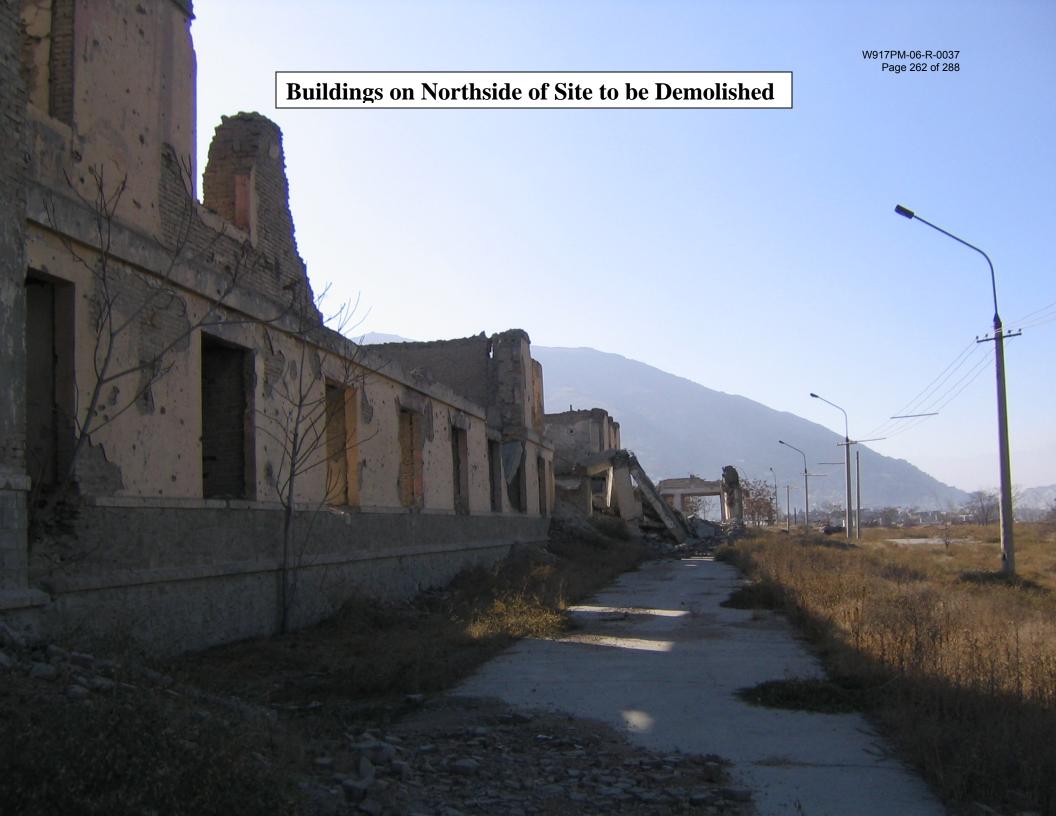


North Westside of Site Currently Being Used as Junk Area



Southside of Site Looking Toward Fort







View of Future G2 Complex Site (Mosque in Background)



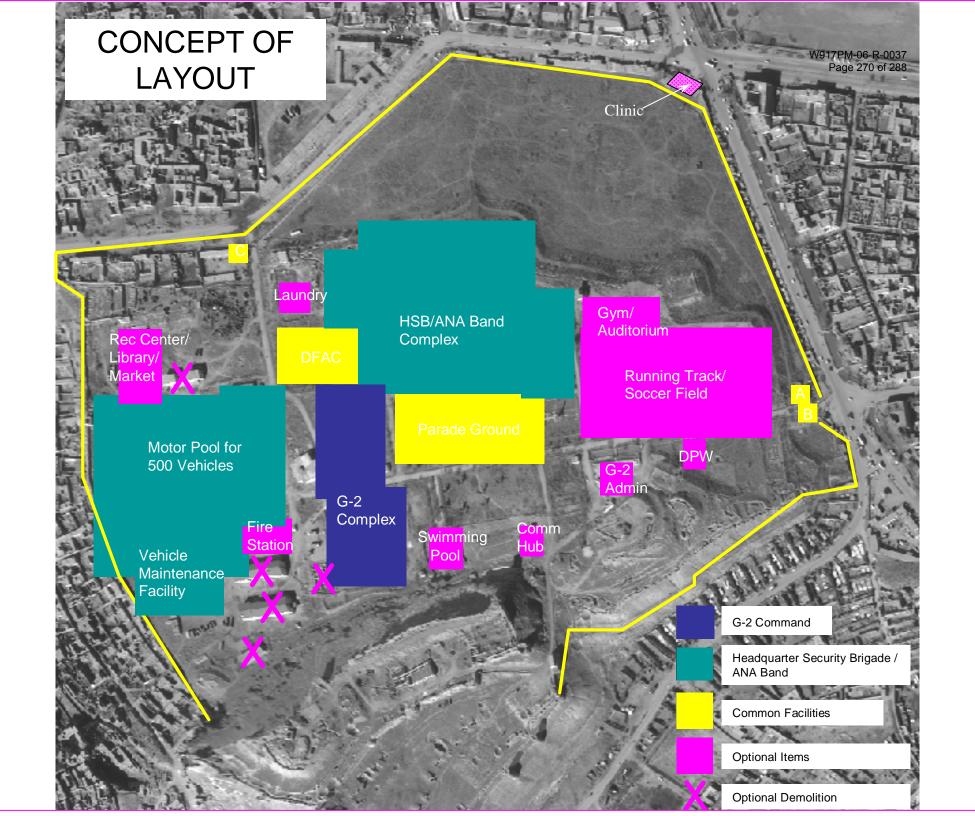


APPENDIX B AERIALS & SITE PLANS BALA HISSAR KABUL, AFGHANISTAN

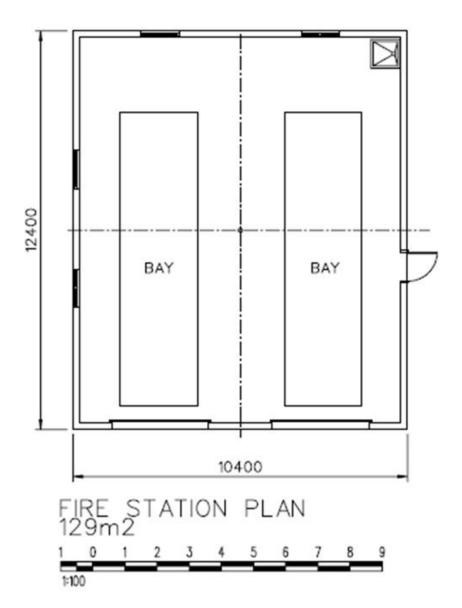








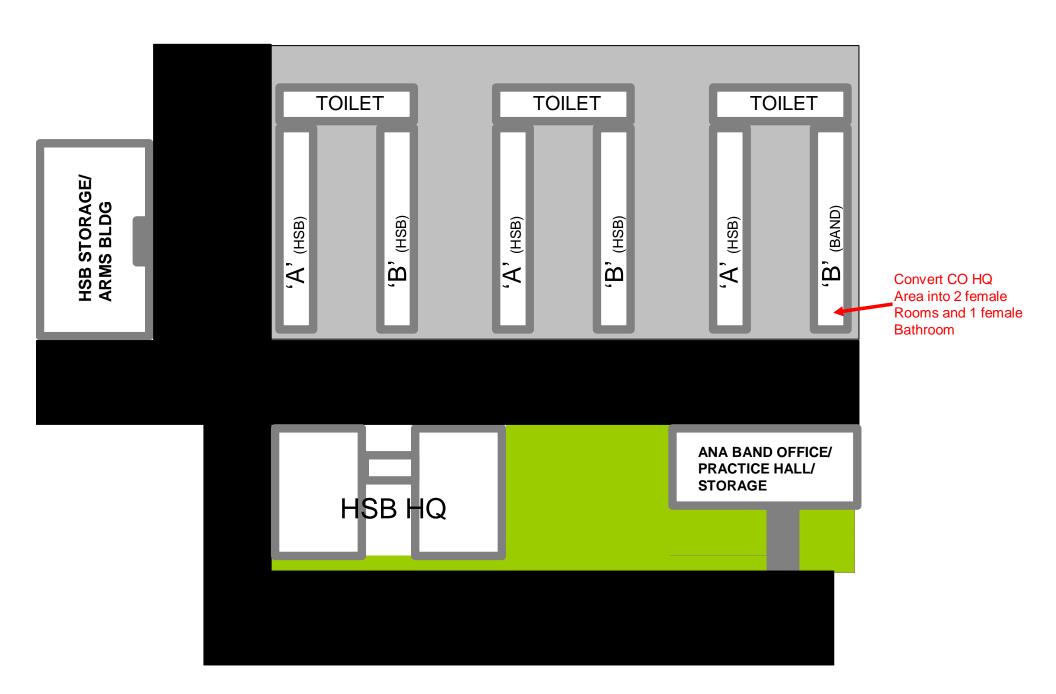
APPENDIX C PROPOSED BUILDING PLANS BALA HISSAR KABUL, AFGHANISTAN



DFAC

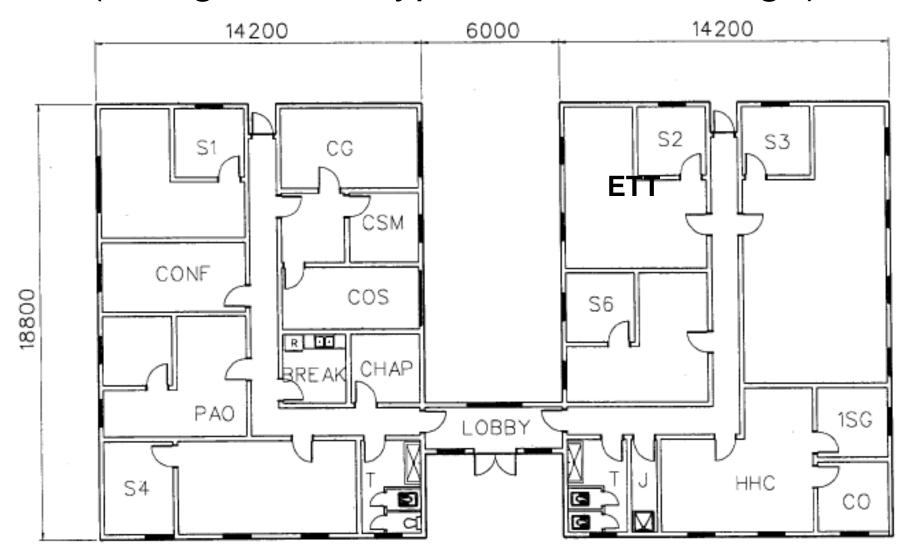
(Sample Drawing. Design for 300 enlisted and - [연'- ;; - 인- - : 인- -; - - 인 - - : - - 인 - ; - - 인 - - : -75 officer simultaneous seating and feeding capacity) **Enlisted Dining Area** CONC PAD - - - - -MECHANICAL REFRIG. 9800 FREEZER DISH DISH WASH RETURN KITCHEN SERVING Officer Dining Room WOOD | COOKING

HSB / ANA BAND COMPLEX



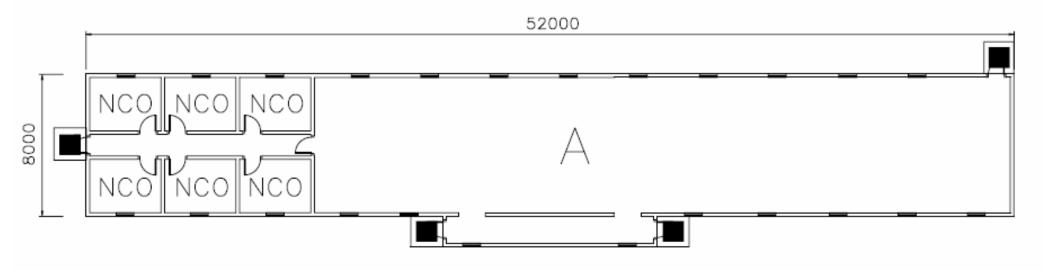
HSB HQ

(Design From Typical BD HQ Design)



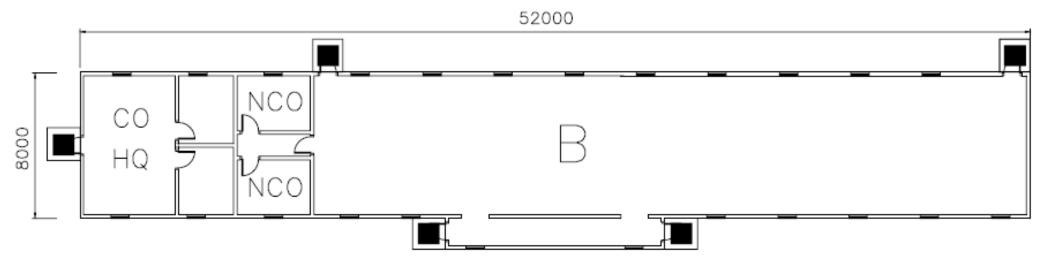
BRIGADE HEADQUARTERS - 552m2 = 5941 sq ft

TYPE 'A' BARRACKS



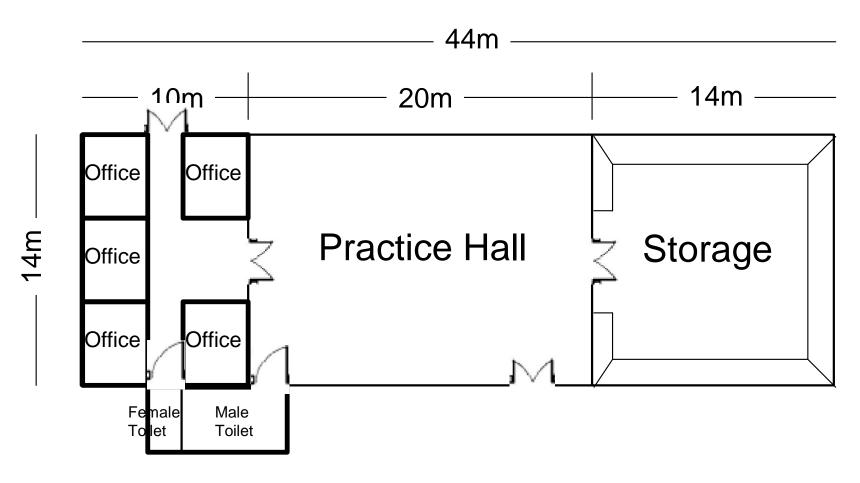
- Total Dimension: 52m x 8m = 416 sq m
- # of Office Rooms: None
- # of Bedrooms: 6 NCO Rooms
- Large Barracks Open Space: 300 sq m
- # of Soldiers in Single Beds: 86
- # of Soldiers in Double Beds: 152
- Provide Shear Wall to meet Seismic Code

TYPE 'B' BARRACKS



- Total Dimension: 52m x 8m = 416 sq m
- # of Office Rooms: CO HQ plus 2 offices 3.5m x 2.5m each
- # of Bedrooms: 2 NCO Rooms
- Large Barracks Open Space: 300 sq m
- # of Soldiers in Single Beds: 86
- # of Soldiers in Double Beds: 152
- Provide Shear Wall to meet Seismic Code

ANA BAND OFFICE / W917PM-06-R-0037 Page 278 of 288 PRACTICE HALL / STORAGE



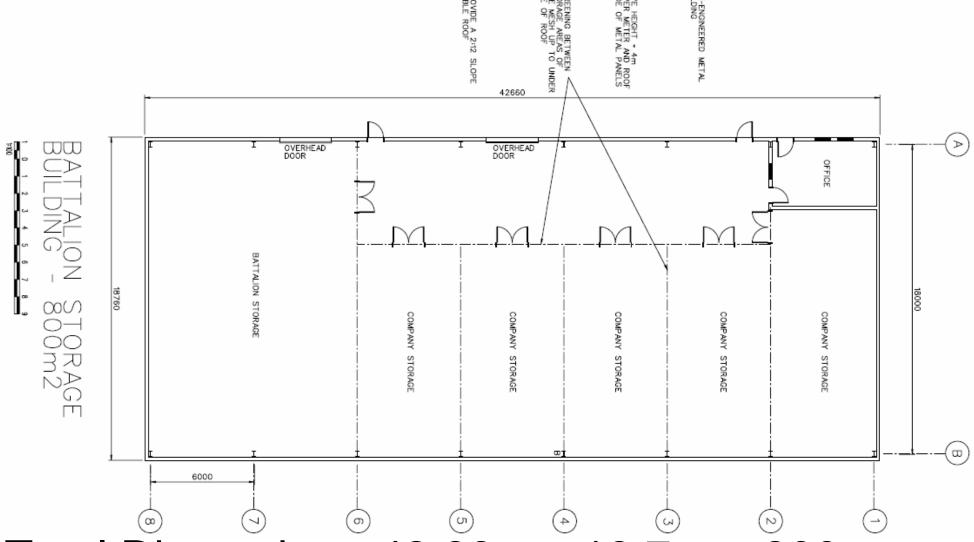
• Office: $3m \times 4m = 12 \text{ sq m each}$

Practice Hall: 14m x 20m = 280 sq m

• Storage: 14m x 14m = 196 sq m

Total: 616 sq m

(Design From Typical BN Storage Bldg)



K-SPAN OR MODULAR CONSTRUCTION, UNHEATED

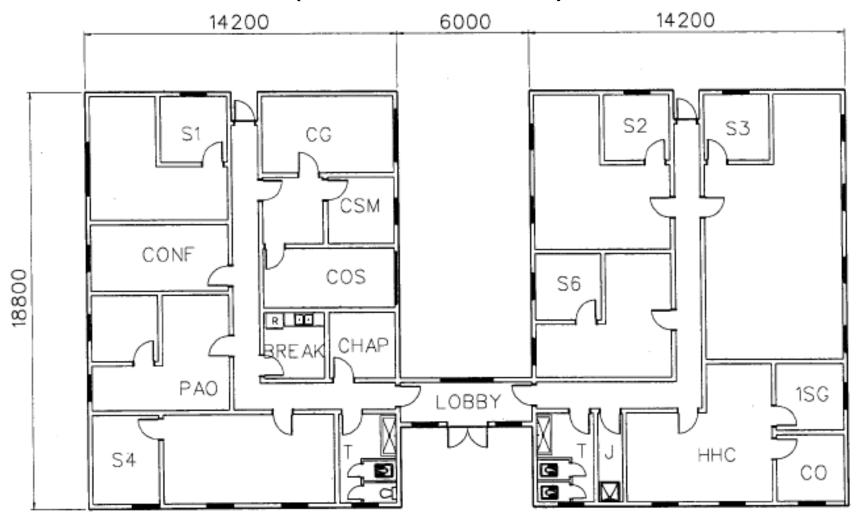
• Total Dimension: 42.66m x 18.7m = 800 sq m

G-2 Complex W917PM-06-R-0037 Page 280 of 288 Bathroom Bathroom BOQ **Items** Classroom Main Staff Building

G-2 Main Staff Bldg

W917PM-06-R-0037 Page 281 of 288

(Two Stories)

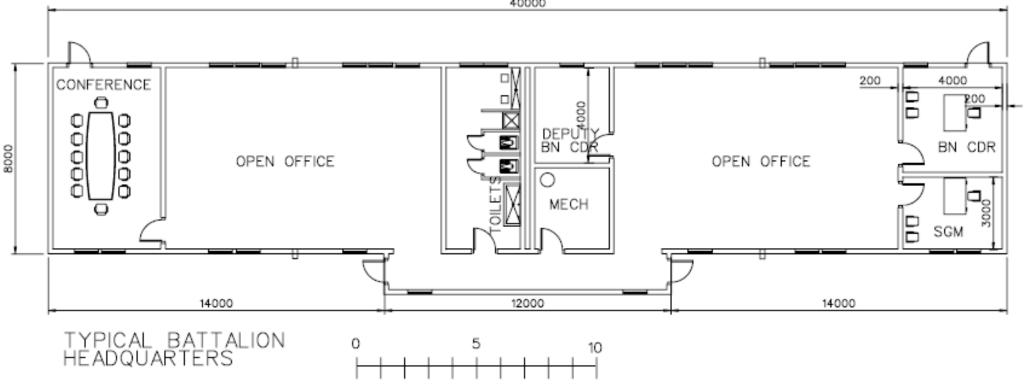


BRIGADE HEADQUARTERS - 552m2 = 5941 sq ft per floor

Design for two stories = approx 1100 sqm

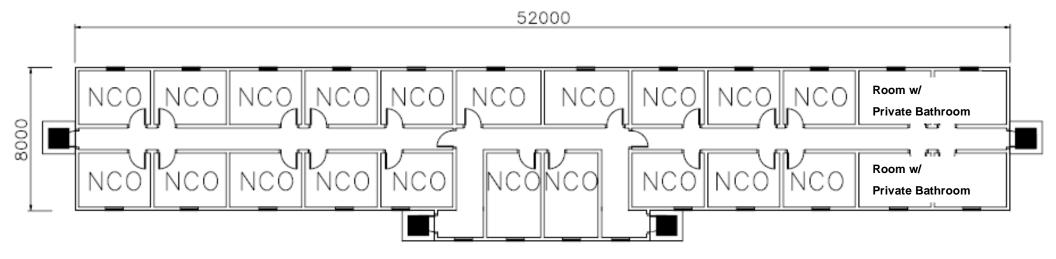
G-2 TRAINING / CLASSROOM

(Design From Typical BN HQ Design)



Total Dimension: 40m x 8m = 320 sq m

BOQ

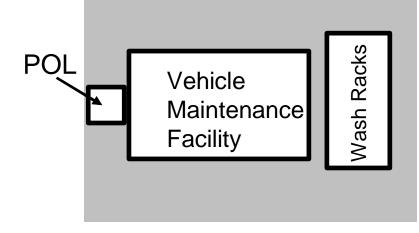


- Total Dimension: 52m x 8m = 416 sq m
- # of Office Rooms: None
- # of Bedrooms: 20 Rooms + 2 Rooms w/ Private Bathroom;
- Each Bedroom: 3m x 4m = 12 sq m
- Large Barracks Open Space: None
- # of Officers in Single Beds: 22
- # of Officers in Double Beds: 44

MOTOR POOL / VEHICLE MAINTENANCE

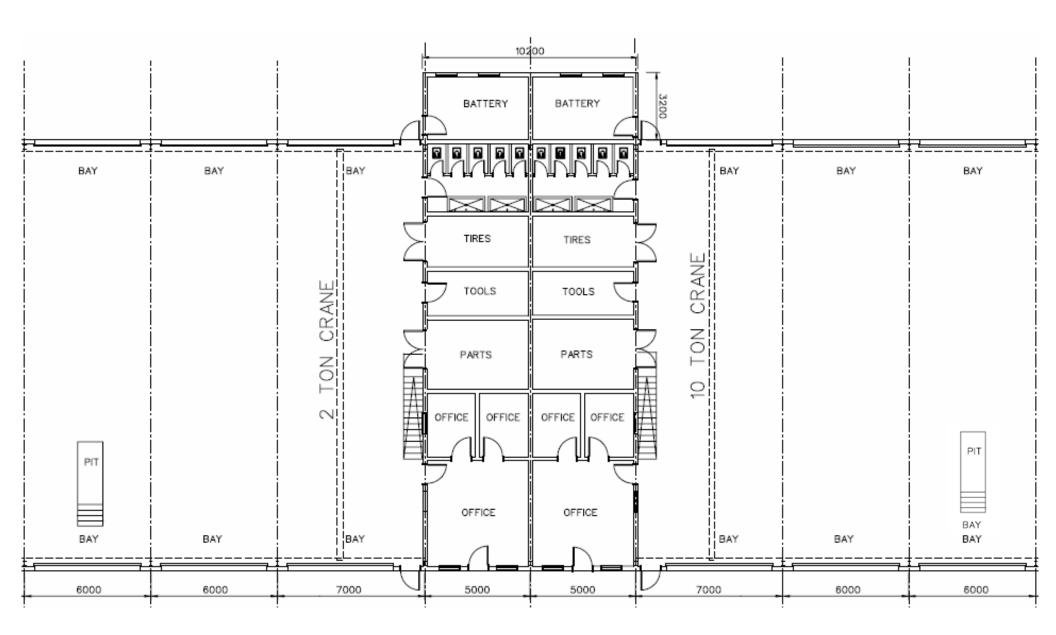
Motor Pool

Fuel Point

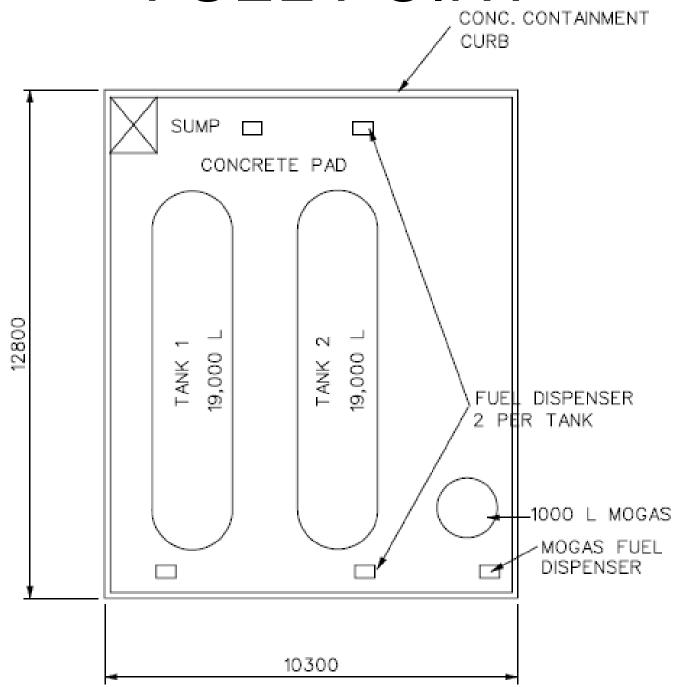


Vehicle Maintenance

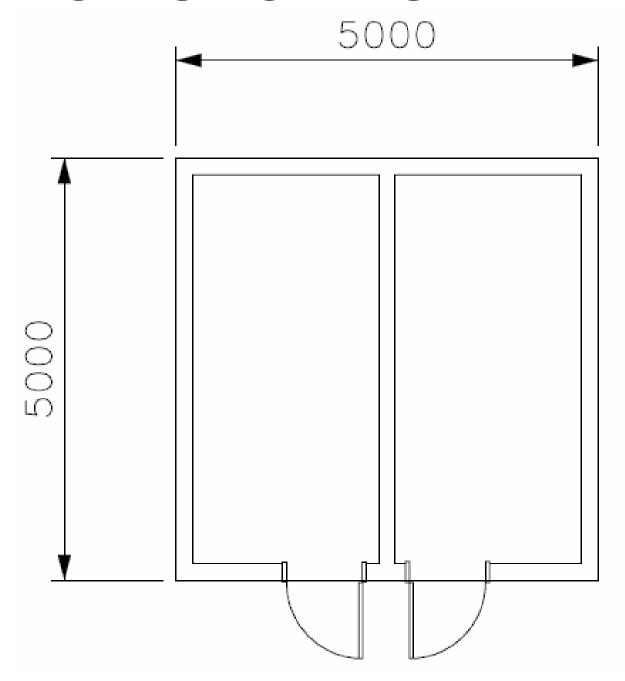
(Sample drawing. Total of 6 bays.)



FUEL POINT



POL STORAGE BLDG



LAUNDRY BUILDING

